

Table S1. Genes regulated by EIIA^{Ntr}. List of all genes from a microarray using wild-type and the *ptsN* mutant *Salmonella*. Genes displayed 2-fold or more changes are marked with red (increase in the *ptsN* mutant) and green (decrease in the *ptsN* mutant) colors.

Gene	P-value (ptsN/WT)	Fold (ptsN/WT)	Probe Comment
STM0001_25_59	0.46	1.74	1251519lthrLlthr operon leader peptidel+
STM0002_1688_1722	0.00	-8.34	1251520lthrAlbifunctional aspartokinase I/homeserine dehydrogenase II+
STM0003_329_363	0.84	-1.05	1251521lthrBlhomoserine kinasel+
STM0004_1040_1074	0.04	-1.83	1251522lthrClthreonine synthasel+
STM0005_257_291	0.07	1.51	1251523lyaaAlhypothetical proteinl-
STM0006_784_818	0.03	1.43	1251524lyaaJlputative alanine/glycine transport proteinl-
STM0007_113_147	0.04	1.38	1251525ltalBltransaldolase Bl+
STM0008_17_51	0.91	-1.01	1251526lmogAlmolybdenum cofactor biosynthesis proteinl+
STM0009_197_231	0.01	1.92	1251527lyaaHlhypothetical proteinl-
STM0010_641_675	0.36	1.07	1251528lhtgAlhypothetical proteinl-
STM0012_982_1016	0.06	1.40	1251530ldnaKlmolecular chaperone DnaKl+
STM0013_797_831	0.02	2.14	1251531ldnaJlchaperone protein DnaJl+
STM0014_673_707	0.04	1.16	1251532lSTM0014lputative transcriptional regulatorl+
STM0017_385_419	0.03	1.23	1251535lSTM0017lhypothetical proteinl-
STM0018_1933_1967	0.02	1.76	1251536lSTM0018lputative exochitinasel+
STM0019_2846_2880	0.20	1.09	1251537lSTM0019lputative hydroxymethyltransferasel+
STM0020_241_275	0.01	1.45	1251538lSTM0020lputative cytoplasmic proteinl+
STM0021_433_467	0.02	1.73	1251539lbcfAlfimbrial subunitl+
STM0022_193_227	0.04	3.01	1251540lbcfBlfimbrial chaparonel+
STM0024_233_267	0.94	1.01	1251542lbcfDlfimbrial subunitl+
STM0025_81_115	0.01	2.19	1251543lbcfElfimbrial subunitl+
STM0027_353_387	0.19	-1.15	1251545lbcfGlfimbrial chaparonel+
STM0028.1n_241_275	0.02	1.90	2673738lSTM0028.1nlhypothetical proteinl+
STM0029_334_371	0.06	-1.61	1251547lSTM0029lputative transcriptional regulatorl-
STM0030_214_248	0.03	1.92	1251548lSTM0030lputative transcriptional regulatorl+
STM0031_217_251	0.03	1.51	1251549lSTM0031lputative transcriptional regulatorl-
STM0033_829_863	0.03	2.46	1251551lSTM0033lputative 5'-nucleotidasel-
STM0035_895_929	0.03	-1.64	1251553lSTM0035lputative arylsulfatasel+
STM0036_224_258	0.56	-1.07	1251554lSTM0036lputative arylsulfatase regulatorl+
STM0037_815_849	0.03	1.24	1251555lSTM0037lputative cytoplasmic proteinl+
STM0039_232_266	0.39	1.07	1251557lnhaAlpH-dependent sodium/proton antiporterl+
STM0040_361_395	0.46	1.09	1251558lnhaRltranscriptional activator NhaRl+
STM0041_1377_1411	0.29	1.12	1251559lSTM0041lputative glycosyl hydrolasel-
STM0042_767_801	0.98	-1.00	1251560lSTM0042lputative sodium galactoside symporterl-

STM0043_49_83	0.01	-2.11	1251561lrpsTl30S ribosomal protein S20l-
STM0044_170_207	0.06	-1.39	1251562lyaaYlputative cytoplasmic proteinl+
STM0045_553_587	0.99	1.00	1251563lribFlbifunctional riboflavin kinase/FMN adenyllyltransferasel+
STM0046_2362_2396	0.02	-1.53	1251564lileSlisoleucyl-tRNA synthetasel+
STM0047_33_67	0.06	1.19	1251565llspAllipoprotein signal peptidasel+
STM0048_9_43	0.07	1.11	1251566lslpAlFKBP-type peptidyl-prolyl cis-trans isomerasel+
STM0049_517_551	0.32	-1.09	1251567lispHl4-hydroxy-3-methylbut-2-enyl diphosphate reductasel+
STM0050_1100_1134	0.06	1.48	1251568lSTM0050lputative nitrite reductasel+
STM0051_385_419	0.40	1.20	1251569lrihClribonucleoside hydrolase RihCl+
STM0052_617_651	0.00	-1.52	1251570lSTM0052lputative transcriptional regulatorl-
STM0053_749_783	0.07	2.27	1251571lSTM0053lputative transcriptional regulatorl-
STM0054_370_404	0.03	1.43	1251572lSTM0054lputative oxalacetate decarboxylase subunit betal-
STM0055_1194_1228	0.13	1.25	1251573lSTM0055lpyruvate carboxylase subunit Bl-
STM0056_101_135	0.76	1.06	1251574lSTM0056loxaloacetate decarboxylase subunit gammal-
STM0057_1302_1336	0.04	2.72	1251575lSTM0057lputative citrate-sodium symporterl-
STM0060_129_163	0.26	1.55	1251578lcitE2lputative citrate lyase beta chainl+
STM0061_1482_1516	0.92	1.01	1251579lcitF2lputative citrate lyase alpha chain/citrate-ACP transferasel+
STM0062_89_123	0.14	1.22	1251580lcitX2lputative cytoplasmic proteinl+
STM0063_65_99	0.99	-1.00	1251581lcitG2ltriphasphoribosyl-dephospho-CoA synthasel+
STM0064_289_323	0.04	-1.38	1251582ldapBlldihydrodipicolinate reductasel+
STM0067_2485_2519	0.14	-1.61	1251585lcarBlcarbamoyl phosphate synthase large subunitl+
STM0068_237_271	0.06	1.42	1251586lcaiFIDNA-binding transcriptional activator CaiFl+
STM0069_209_243	0.95	1.00	1251587lcaiElcarnitine racemase stimulation factorl-
STM0070_449_483	0.82	1.02	1251588lcaiDlcarnitinyl-CoA dehydratasel-
STM0071_1195_1229	0.44	1.27	1251589lcaiClputative crotonobetaine/carnitine-CoA ligasel-
STM0072_731_765	0.37	1.17	1251590lcaiBlcrotonobetainyl-CoA:carnitine CoA-transferasel-
STM0073_1104_1138	0.03	1.68	1251591lcaiAlcrotonobetainyl-CoA dehydrogenasel-
STM0074_663_697	0.69	-1.06	1251592lcaiTl-carnitine/gamma-butyrobetaine antiporterl-
STM0075_449_483	0.03	2.30	1251593lfixAlputative electron transfer flavoprotein FixAl+
STM0078_3_37	0.20	1.54	1251596lfixXlputative ferredoxinl+
STM0079_726_760	0.18	1.25	1251597lyaaUlputative transport proteinl+
STM0080_33_67	0.02	1.36	1251598lSTM0080lputative outer membrane lipoproteinl+
STM0081_289_323	0.02	3.68	1251599lSTM0081lputative secreted proteinl+
STM0082_217_251	0.01	3.65	1251600lSTM0082lputative secreted proteinl-
STM0084_1787_1821	0.04	1.61	1251602lSTM0084lputative sulfatasel+

STM0085_433_467	0.98	1.00	1251603lyabFlglutathione-regulated potassium-efflux system ancillary protein KefFl+
STM0086_1440_1474	0.01	1.37	1251604lcefClglutathione-regulated potassium-efflux system protein KefCl+
STM0087_345_379	0.04	1.89	1251605lfolAldihydrofolate reductasel+
STM0088_33_67	0.03	-1.52	1251606lapaHldiadenosine tetraphosphatasel-
STM0089_129_163	0.17	1.18	1251607lapaGIapaGI-
STM0090_641_675	0.19	-1.10	1251608lksgAldimethyladenosine transferasel-
STM0091_641_675	0.00	-1.38	1251609lpdxAl4-hydroxythreonine-4-phosphate dehydrogenasel-
STM0092_352_386	0.29	-1.25	1251610lsurAlpeptidyl-prolyl cis-trans isomerase SurAl-
STM0093_1874_1908	0.01	-1.99	1251611lmpIorganic solvent tolerance proteinl-
STM0094_353_387	0.03	1.26	1251612ldjAlDna-J like membrane chaperone proteinl+
STM0095_65_99	0.28	1.11	1251613lrluAl23S rRNA/tRNA pseudouridine synthase Al-
STM0096_2436_2470	0.03	-1.25	1251614lhepAlATP-dependent helicase HepAl-
STM0097_1625_1659	0.01	1.65	1251615lpolBIDNA polymerase III-
STM0098_465_499	0.04	1.64	1251616lSTM0098lputative secreted proteinl-
STM0100_2_36	0.01	2.25	1251618lSTM0100lputative cytoplasmic proteinl+
STM0101_226_260	0.82	-1.04	1251619laraDIL-ribulose-5-phosphate 4-epimerasel-
STM0102_1464_1498	0.02	-1.47	1251620laraAlL-arabinose isomerasel-
STM0103_871_905	0.01	-1.59	1251621laraBlribulokinasel-
STM0104_217_251	0.65	-1.06	1251622laraCIDNA-binding transcriptional regulator AraCl+
STM0105_321_355	0.10	-1.48	1251623lyablIhypothetical proteinl+
STM0106_345_379	0.04	-1.55	1251624lthiQlthiamin transporter ATP-binding subunitl-
STM0107_1348_1382	0.18	-1.26	1251625lthiPlthiamin transporter membrane proteinl-
STM0108_49_83	0.62	1.28	1251626ltbpAlthiamin transporter substrate binding subunitl-
STM0109_868_902	0.60	-1.04	1251627lyabNlputative periplasmic binding proteinl-
STM0110_49_83	0.12	1.41	1251628lIeuDlsoopropylmalate isomerase small subunitl-
STM0111_438_472	0.98	1.00	1251629lIeuClisopropylmalate isomerase large subunitl-
STM0112_605_639	0.20	-1.35	1251630lIeuBl3-isopropylmalate dehydrogenasel-
STM0113_1469_1503	0.09	2.11	1251631lIeuAl2-isopropylmalate synthasel-
STM0114_11_45	0.62	1.37	1251632lIeuLlIeu operon leader peptidel-
STM0115_641_675	0.66	-1.08	1251633lIeuOlluecine transcriptional activatorl+
STM0116_855_889	0.79	1.04	1251634lilvllacetolactate synthase 3 catalytic subunitl+
STM0117_417_451	0.02	-2.16	1251635lilvHlacetolactate synthase 3 regulatory subunitl+
STM0118_214_248	0.04	-1.27	1251636lfruRlDNA-binding transcriptional regulator FruRl+
STM0119_17_51	0.86	-1.03	1251637lyabBlhypothetical proteinl+
STM0120_273_307	0.01	-1.94	1251638lmraWlS-adenosyl-methyltransferase MraWI+

STM0121_34_68	0.02	-1.61	1251639 ftsL cell division protein FtsL+
STM0122_1280_1314	0.77	1.04	1251640 ftsI division specific transpeptidasel+
STM0123_617_651	0.01	-2.12	1251641 murE UDP-N-acetyl muramoylalanyl-D-glutamate--2 6-diaminopimelate ligasel+
STM0124_456_490	0.02	-1.83	1251642 murF UDP-N-acetyl muramoyl-tripeptide--D-alanyl-D-alanine ligasel+
STM0125_308_342	0.00	-1.51	1251643 mraY phospho-N-acetyl muramoyl-pentapeptide-transferasel+
STM0126_606_640	0.04	-1.69	1251644 murD UDP-N-acetyl muramoyl-L-alanyl-D-glutamate synthetasel+
STM0127_694_728	0.03	-1.28	1251645 ftsW essential cell division genel+
STM0128_165_199	0.09	-1.18	1251646 murG N-acetyl glucosaminyl transferasel+
STM0129_589_623	0.01	-2.34	1251647 murC UDP-N-acetyl muramate--L-alanine ligasel+
STM0130_609_643	0.00	-1.83	1251648 ddII D-alanine--D-alanine ligasel+
STM0131_449_483	0.02	-1.47	1251649 ftsQ cell division protein FtsQI+
STM0132_792_826	0.00	-1.81	1251650 ftsA cell division protein FtsAI+
STM0133_361_395	0.26	-1.21	1251651 ftsZ cell division protein FtsZI+
STM0134_473_507	0.10	-1.19	1251652 lpfC UDP-3-O-[3-hydroxymyristoyl] N-acetyl glucosamine deacetylasel+
STM0135_425_459	0.11	1.63	1251653 yacA SecA regulator SecM+
STM0136_2347_2381	0.01	-1.80	1251654 secA preprotein translocase subunit SecA+
STM0137_351_389	0.05	-1.74	1251655 mutT nucleoside triphosphate pyrophosphohydrolase marked preference for dGTPI+
STM0137.1N_7_41	0.97	-1.00	2673762 STM0137.1N -I-
STM0138_89_123	0.01	1.46	1251656 yacG zinc-binding proteinl-
STM0139_513_547	0.57	-1.04	1251657 yacF hypothetical proteinl-
STM0140_513_547	0.34	-1.14	1251658 coAE dephospho-CoA kinasel-
STM0141_477_511	0.86	1.03	1251659 guaC guanosine 5'-monophosphate oxidoreductasel+
STM0142_652_686	0.35	1.19	1251660 hofC type IV pilin biogenesis proteinl-
STM0144_65_99	0.83	1.05	1251662 ppdD putative major pilin subunitl-
STM0145_49_83	0.58	-1.03	1251663 nadC quinolinate phosphoribosyltransferasel-
STM0146_193_227	0.32	1.08	1251664 ampD N-acetyl-anhydromuranmyl-L-alanine amidasel+
STM0147_545_579	0.01	1.37	1251665 ampE regulatory protein AmpE+
STM0148_737_771	0.83	-1.02	1251666 STM0148 putative cytoplasmic proteinl-
STM0149_472_506	0.93	1.01	1251667 STM0149 Na+/galactoside symporterl-
STM0150_503_537	0.01	-2.94	1251668 aroP aromatic amino acid transporterl-
STM0151_161_195	0.00	5.54	1251669 pdhR transcriptional regulator PdhR+
STM0152_1793_1827	0.01	2.52	1251670 aceE pyruvate dehydrogenase subunit E1I+
STM0153_1275_1309	0.03	1.99	1251671 aceF dihydrolipoamide acetyltransferasel+

STM0154_1034_1068	0.03	1.59	1251672 lpdAldihydrolipoamide dehydrogenasel+
STM0155_27_61	0.03	1.35	1251673 STM0155lputative outer membrane proteinl+
STM0156_681_715	0.95	1.01	1251674 STM0156lputative periplasmic proteinl-
STM0157_1474_1508	0.12	1.57	1251675 yacHlputative outer membrane proteinl-
STM0158_2239_2273	0.05	-1.47	1251676 lacnB bifunctional aconitate hydratase 2/2-methylisocitrate dehydratasel+
STM0159_321_355	0.11	1.25	1251677 STM0159lputative restriction endonucleasel-
STM0160_117_151	0.04	1.27	1251678 yacL hypothetical proteinl+
STM0161_705_739	0.06	1.93	1251679 kdgT 2-keto-3-deoxygluconate permeasel+
STM0163_545_579	0.01	-1.45	1251681 pdxA 4-hydroxythreonine-4-phosphate dehydrogenase 2l+
STM0164_97_131	0.10	1.19	1251682 STM0164lputative transcriptional regulatorl+
STM0165_321_355	0.12	-1.59	1251683 speD adenosylmethionine decarboxylasel-
STM0166_337_371	0.43	1.43	1251684 speE spermidine synthasel-
STM0168_1268_1302	0.04	-1.96	1251686 cueO milticopper oxidasel+
STM0169_1680_1714	0.30	1.27	1251687 gcd glucose dehydrogenasel-
STM0170_65_99	0.91	-1.02	1251688 hptl hypoxanthine-guanine phosphoribosyltransferasel+
STM0171_225_259	0.43	-1.11	1251689 yadF carbonic anhydrasel-
STM0172_289_323	0.03	1.22	1251690 yadG putative ABC-type multidrug transport system ATPase componentl+
STM0173_609_643	0.08	-1.13	1251691 yadH putative transport proteinl+
STM0174_801_835	0.11	1.48	1251692 stiH putative fimbrial protein precurosrl-
STM0175_1948_1982	0.65	1.09	1251693 stiC putativie fimbrial usherl-
STM0176_625_659	0.04	1.47	1251694 stiB putative fimbrial chaparonel-
STM0177_213_247	0.06	1.51	1251695 stiA putative fimbrial subunitl-
STM0178_294_328	0.07	1.38	1251696 yadD putative PTS enzymel+
STM0179_279_313	0.01	-2.01	1251697 yadE putative xylanase/chitin deacetylasel+
STM0180_145_179	0.77	-1.07	1251698 panD aspartate alpha-decarboxylasel-
STM0181_321_355	0.99	1.01	1251699 panC pantoate--beta-alanine ligasel-
STM0182_229_263	0.11	-1.21	1251700 panB 3-methyl-2-oxobutanoate hydroxymethyltransferasel-
STM0183_377_411	0.29	-1.18	1251701 folK 2-amino-4-hydroxy-6-hydroxymethylhyropteridine pyrophosphokinasel-
STM0184_524_558	0.03	-2.08	1251702 pcnB poly(A) polymerase II-
STM0185_513_547	0.25	-1.28	1251703 yadB glutamyl-Q tRNA(Asp) synthetasel-
STM0186_17_51	0.42	-1.13	1251704 dksA DnaK transcriptional regulator DksAl-
STM0187_251_285	0.09	1.16	1251705 sfS sugar fermentation stimulation protein Al-
STM0188_211_245	0.00	1.52	1251706 ligT 2'-5' RNA ligasel-

STM0189_1572_1606	0.01	-1.88	1251707lhrlhrpBlATP-dependent RNA helicase HrpBl+
STM0190_1780_1814	0.92	1.00	1251708lmrcBlpenicillin-binding protein 1bl+
STM0191_1959_1993	0.02	-3.06	1251709lfhuAlferrichrome outer membrane transporterl+
STM0192_729_763	0.22	-1.41	1251710lfhuCliron-hydroxamate transporter ATP-binding subunitl+
STM0193_249_283	0.01	2.61	1251711lfhuDliron-hydroxamate transporter substrate-binding subunitl+
STM0194_2011_2045	0.05	2.35	1251712lfhuBliron-hydroxamate transporter permease subunitl+
STM0195_65_99	0.91	-1.05	1251713lstfAlputative fimbrial subunitl+
STM0198_305_339	0.02	2.62	1251716lstfElputative minor fimbrial subunitl+
STM0199_117_151	0.50	-1.28	1251717lstfFlputative minor fimbrial subunitl+
STM0200_335_369	0.18	1.17	1251718lstfGlputative minor fimbrial subunitl+
STM0201_705_739	0.04	2.15	1251719ISTM0201lputative outer membrane proteinl+
STM0202_698_732	0.04	1.56	1251720lhemLlglutamate-1-semialdehyde aminotransferasel-
STM0203_943_977	0.01	-1.65	1251721lyadQlchloride channel proteinl+
STM0204.S_273_307	0.01	1.90	1251722lyadRlhypothetical proteinl+
STM0205_449_483	0.57	1.06	1251723lyadSlhypothetical proteinl-
STM0206_270_304	0.30	2.07	1251724lbtruFlvitamin B12-transporter protein BtuFl-
STM0207_289_323	0.06	-1.43	1251725lpfsl5'-methylthioadenosine/S-adenosylhomocysteine nucleosidasel-
STM0208_1351_1385	0.04	1.63	1251726ldgtldeoxyguanosinetriphosphate triphosphohydrolasel+
STM0209_1101_1135	0.04	2.06	1251727lhtrAlserine endoproteasel+
STM0210_639_673	0.00	-3.24	1251728lcdaRlcarbohydrate diacid transcriptional activator CdaRl+
STM0211_289_323	0.01	-2.60	1251729lyaeHlputative cytoplasmic proteinl-
STM0212_879_913	0.23	1.08	1251730ISTM0212lputative inner membrane proteinl+
STM0213_641_675	0.78	1.03	1251731ldapDl2 3 4 5-tetrahydropyridine-2-carboxylate N-succinyltransferasel-
STM0214_2634_2668	0.14	1.22	1251732lglnDIPll uridylyl-transferasel-
STM0215_593_627	0.04	-1.34	1251733lmaplmethionine aminopeptidasel-
STM0216_609_643	0.06	-1.55	1251734lrpsBl30S ribosomal protein S2l+
STM0217_689_723	0.04	-2.28	1251735ltsfelelongation factor Tsl+
STM0218_65_99	0.02	-2.03	1251736lpyrHluridylate kinasel+
STM0219_241_275	0.05	-1.31	1251737lfrrribosome recycling factorl+
STM0220_478_512	0.66	-1.06	1251738ldxr1l-deoxy-D-xylulose 5-phosphate reductoisomerasel+
STM0221_389_423	0.01	-2.10	1251739luppSlundecaprenyl pyrophosphate synthasel+
STM0222_705_739	0.07	-1.27	1251740lcdsAlCDP-diglyceride synthasel+
STM0223_482_516	0.01	-1.72	1251741lyaeLlzinc metallopeptidasel+
STM0224_1416_1450	0.02	-1.51	1251742lyaeTlouter membrane protein assembly factor YaeTl+
STM0225_97_131	0.03	-1.53	1251743lhlpAlperiplasmic chaperonel+
STM0226_363_397	0.74	-1.05	1251744llpxDIUDP-3-O-[3-hydroxymyristoyl] glucosamine N-acyltransferasel+

STM0227_217_251	0.07	-1.49	1251745fabZl(3R)-hydroxymyristoyl-(acyl carrier protein) dehydrataseI+
STM0228_385_419	0.15	-1.25	1251746llpxAlUDP-N-acetylglucosamine acyltransferasel+
STM0229_214_248	0.08	1.26	1251747llpxBllipid-A-disaccharide synthasel+
STM0230_393_427	0.02	-1.57	1251748lrnhBlribonuclease HII+
STM0232_553_587	0.07	-1.52	1251750laccAlacetyl-CoA carboxylase carboxyltransferase subunit alphal+
STM0233_1213_1247	0.23	1.17	1251751ISTM0233lputative endochitinasel+
STM0234_1303_1337	0.12	1.30	1251752lldcCllysine decarboxylase 2l+
STM0235_138_172	0.37	1.11	1251753lyaeRlhypothetical proteinl+
STM0236_1078_1112	0.12	1.43	1251754ltlSltRNA(Ile)-lysidine synthetasel+
STM0237_33_67	0.17	1.31	1251755lroflRho-binding antiterminatorl-
STM0238_177_211	0.21	1.32	1251756lyaePlhypothetical proteinl-
STM0239_373_407	0.41	-1.19	1251757lyaeQlputative cytoplasmic proteinl+
STM0240_9_43	0.03	-1.39	1251758lyaeJlhypothetical proteinl+
STM0241_49_83	0.01	3.01	1251759lcutflpseudol+
STM0242_1184_1218	0.01	-2.53	1251760lproSlprolyl-tRNA synthetasel-
STM0243_313_347	0.02	-1.53	1251761lyaeBlputative regulatory proteinl-
STM0244_185_219	0.44	1.15	1251762lrcsFlouter membrane lipoproteinl-
STM0245_289_323	0.01	2.55	1251763lmetQIDL-methionine transporter substrate-binding subunitl-
STM0246_329_363	0.01	4.10	1251764lyaeEIDL-methionine transporter permease subunitl-
STM0247_609_643	0.01	4.53	1251765lmetNIDL-methionine transporter ATP-binding subunitl-
STM0248_49_83	0.24	1.38	1251766lyaeDID D-heptose 1 7-bisphosphate phosphatasel+
STM0250_36_70	0.02	-2.30	1251768lileVltRNAl+
STM0255_257_291	0.12	1.34	1251773ldkgB12 5-diketo-D-gluconate reductase Bl+
STM0256_129_163	0.43	-1.11	1251774lyafClputative transcriptional regulatorl-
STM0257_1009_1043	1.00	1.00	1251775ISTM0257lputative drug efflux proteinl+
STM0258_225_259	0.02	1.17	1251776lyafDlhypothetical proteinl+
STM0259_385_419	0.06	-1.39	1251777lyafElputative methyltransferasel+
STM0260_369_403	0.00	-2.65	1251778ldniRlpredicted membrane-bound lytic murein transglycosylase Di-
STM0261_521_555	0.07	1.84	1251779lgloBlpredicted hydroxyacylglutathione hydrolasel-
STM0262_257_291	0.09	1.17	1251780lyafSlputative SAM-dependent methyltransferasel+
STM0263_129_163	0.30	1.08	1251781lrnhAlribonuclease Hl-
STM0264_49_83	0.62	-1.04	1251782ldnaQlDNA polymerase III subunit epsilonl+
STM0266_185_219	0.08	-1.18	1251784ISTM0266lputative cytoplasmic proteinl-
STM0268_1301_1335	0.17	-1.20	1251786ISTM0268lputative cytoplasmic proteinl-
STM0270_625_659	0.75	1.10	1251788ISTM0270lputative cytoplasmic proteinl-
STM0271_129_163	0.18	1.16	1251789ISTM0271lputative cytoplasmic proteinl-

STM0273_273_307	0.05	1.40	1251791 STM0273 putative cytoplasmic proteinl+
STM0274_894_928	0.05	1.54	1251792 STM0274 putative cytoplasmic proteinl+
STM0275.s_73_107	0.03	1.65	1251794 STM0275.s putative cytoplasmic proteinl+
STM0277_161_195	0.02	1.68	1251796 STM0277 putative cytoplasmic proteinl+
STM0278_127_161	0.42	1.25	1251797 STM0278 putative periplasmic proteinl+
STM0280_81_115	0.07	1.40	1251799 STM0280 putative outer membrane lipoproteinl+
STM0281_345_379	0.26	1.15	1251800 STM0281 putative cytoplasmic proteinl+
STM0283_117_151	0.00	2.35	1251802 STM0283 putative inner membrane proteinl+
STM0284_58_95	0.05	1.77	1251803 STM0284 putative Shiga-like toxin A subunitl+
STM0285_3479_3513	0.75	-1.12	1251804 STM0285 putative inner membrane proteinl+
STM0286_85_120	0.03	-1.44	1251805 STM0286 putative cytoplasmic proteinl+
STM0288_241_275	0.03	1.12	1251807 STM0288 putative cytoplasmic proteinl+
STM0289_1831_1865	0.01	2.37	1251808 STM0289 putative cytoplasmic proteinl+
STM0290_113_150	0.05	2.29	1251809 STM0290 putative cytoplasmic proteinl+
STM0291_3968_4002	0.36	1.16	1251810 STM0291 putative RHS-like proteinl+
STM0292_359_397	0.15	1.46	1251811 STM0292 putative RHS-like proteinl+
STM0293_57_95	0.36	1.14	1251812 STM0293 putative cytoplasmic proteinl+
STM0294_61_98	0.00	2.15	1251813 STM0294 putative cytoplasmic proteinl+
STM0294.1N_28_62	0.03	-1.41	2673758 STM0294.1N hypothetical proteinl-
STM0295_99_137	0.03	1.51	1251814 STM0295 putative cytoplasmic proteinl+
STM0299_465_500	0.16	1.31	1251818 safl putative outer membrane proteinl+
STM0300_393_427	0.46	1.09	1251819 safl putative fimbrial assembly chaperonel+
STM0301_1912_1946	0.40	1.10	1251820 safl putative fimbrial usherl+
STM0302_181_215	0.58	-1.15	1251821 safl putative fimbrial subunitl+
STM0303_321_355	0.13	-1.55	1251822 ybeJl putative xylanase/chitin deacetylasel+
STM0304_161_195	0.23	-1.27	1251823 sinRl transcriptional regulatorl+
STM0305_161_195	0.81	1.07	1251824 STM0305l putative cytoplasmic proteinl+
STM0306_401_435	0.01	2.25	1251825 STM0306l SapA-like proteinl-
STM0307_229_263	0.01	3.42	1251826 STM0307l VirG-like proteinl-
STM0308_417_451	0.02	1.34	1251827 yafVl hypothetical proteinl-
STM0309_1830_1864	0.93	1.01	1251828 fadEl acyl-CoA dehydrogenasel-
STM0310_353_387	0.03	-1.13	1251829 gmhAl phosphoheptose isomerasel+
STM0311_321_355	0.63	1.05	1251830 yafJl putative glutamine amidotransferasel+
STM0312_273_307	0.00	-4.13	1251831 yafKl putative periplasmic proteinl-
STM0313_761_795	0.07	1.21	1251832 dinP DNA polymerase IVl+
STM0314_1038_1072	0.09	1.68	1251833 STM0314l pseudol+

STM0315_289_323	0.28	-1.17	1251834lprfH peptide chain release factor-like proteinl+
STM0316_1387_1421	0.03	1.50	1251835lpepD aminoacyl-histidine dipeptidasel-
STM0317_137_171	0.05	-1.95	1251836lgptl xanthine-guanine phosphoribosyltransferasel+
STM0318_374_408	0.56	-1.04	1251837lfrsA fermentation/respiration switch proteinl+
STM0319_241_275	0.04	1.58	1251838lcrl DNA-binding transcriptional regulator Crl+
STM0320_190_224	0.00	2.72	1251839lphoE outer membrane phosphoporin protein El-
STM0321_361_395	0.09	-1.50	1251840lproB gamma-glutamyl kinasel+
STM0322_348_382	0.74	-1.22	1251841lproAlg gamma-glutamyl phosphate reductasel+
STM0325_579_613	0.01	1.52	1251844lSTM0325lputative truncated IS3 transposasel-
STM0327_129_163	0.00	-2.33	1251846lSTM0327lputative cytoplasmic proteinl+
STM0328.s_435_469	0.04	1.33	1251847lSTM0328.s putative permeasel+
STM0329_431_465	0.04	-1.35	1251848lSTM0329l isopropylmalate isomerase large subunitl+
STM0330_337_371	0.86	-1.02	1251849lSTM0330lputative 3-isopropylmalate isomerasel+
STM0332_609_643	0.11	1.54	1251851lSTM0332lputative hydrolase/acyltransferasel+
STM0333_769_803	0.25	-1.12	1251852lSTM0333lputative transcriptional regulatorl+
STM0335_19_54	0.96	1.02	1251854lSTM0335lputative outer membrane proteinl+
STM0336_177_211	0.02	1.49	1251855lstmEl putative fimbrial chaperonel-
STM0338_1787_1821	0.94	-1.01	1251857lstmCl putative fimbrial usherl-
STM0339_193_227	0.04	2.35	1251858lstmBl putative fimbrial chaperonel-
STM0340_283_317	0.41	1.26	1251859lstmAl putative fimbrial major subunitl-
STM0341_275_309	0.02	2.96	1251860lSTM0341lputative inner membrane proteinl+
STM0342_49_83	0.47	-1.09	1251861lSTM0342lputative periplasmic proteinl+
STM0343_1128_1162	0.15	1.51	1251862lSTM0343l hypotheslcal proteinl+
STM0344_369_403	0.16	1.81	1251863lSTM0344lputative response regulatorl+
STM0345_385_419	0.91	-1.04	1251864lSTM0345lputative inner membrane proteinl+
STM0346_337_371	0.07	2.93	1251865lSTM0346lputative outer membrane proteinl+
STM0347_249_283	0.01	1.93	1251866lSTM0347lputative response regulatorl+
STM0348_45_79	0.03	3.27	1251867lSTM0348lputative inner membrane proteinl+
STM0349_65_99	0.16	1.38	1251868lSTM0349lputative outer membrane lipoproteinl+
STM0350.S_1307_1341	0.65	1.08	1251869lSTM0350.S outer membrane efflux-like proteinl-
STM0351_2377_2411	0.20	1.43	1251870lSTM0351lputative cation efflux system proteinl-
STM0352.S_607_641	0.15	1.71	1251871lSTM0352.S putative cation efflux pumpL-
STM0353_1658_1692	0.03	-1.45	1251872lSTM0353lputative cation transport ATPasel+
STM0354_365_399	0.95	-1.01	1251873lSTM0354lputative transcriptional regulatorl+
STM0355_62_96	0.04	-1.41	1251874lSTM0355lputative copper chaperonel+
STM0356_479_513	0.00	-2.40	1251875lSTM0356lputative inner membrane proteinl+

STM0357_1088_1122	0.02	1.48	1251876lmodlDNA methylasel+
STM0359_2_40	0.02	2.25	1251878lSTM0359lputative cytoplasmic proteinl+
STM0360_949_983	0.40	1.24	1251879lSTM0360lcytochrome BD2 subunit II+
STM0361_16_50	0.89	1.03	1251880lSTM0361lcytochrome BD2 subunit III+
STM0362_65_99	0.72	1.09	1251881lSTM0362lputative cytoplasmic proteinl+
STM0363_118_152	0.00	2.39	1251882lSTM0363lputative transcriptional regulatorl+
STM0364_1398_1432	0.88	1.04	1251883lfoxAlferrioxamine receptorl+
STM0365_4_38	0.00	-4.16	1251884lyahNlputative transport proteinl-
STM0366_95_129	0.32	-1.24	1251885lyahOlhypothetical proteinl+
STM0367_1107_1141	0.00	-4.26	1251886lprpRlprp operon regulatorl-
STM0368_65_99	0.09	-1.26	1251887lprpB12-methylisocitrate lyasel+
STM0369_471_505	0.46	1.44	1251888lprpC1methylcitrate synthasel+
STM0370_1029_1063	0.06	1.41	1251889lprpD12-methylcitrate dehydratasel+
STM0372_553_587	0.02	1.63	1251891lhemBldelta-aminolevulinic acid dehydratasel-
STM0373_2770_2804	0.82	1.02	1251892lyaiUlflagellar proteinl+
STM0374_257_291	0.01	2.24	1251893lyaiVlputative DNA-binding transcriptional regulatorl+
STM0375_132_166	0.08	-1.29	1251894lampHlbeta-lactamase/D-alanine carboxypeptidasel-
STM0376_1150_1184	0.13	1.40	1251895lsbmAltransport proteinl+
STM0377_1008_1042	0.04	1.26	1251896yaiWlputative outer membrane lipoproteinl+
STM0378_165_199	0.00	4.41	1251897yaiYlputative inner membrane proteinl-
STM0379_125_159	0.00	-2.93	1251898yaiZlputative inner membrane proteinl+
STM0380_256_290	0.01	-1.64	1251899lddlID-alanyl-alanine synthetase Al-
STM0381_625_659	0.29	1.23	1251900lSTM0381lputative inner membrane proteinl+
STM0382_213_247	0.02	1.31	1251901lSTM0382lputative permeasel+
STM0383_197_231	0.03	1.93	1251902lyaiBlhypothetical proteinl+
STM0384_129_163	0.01	4.71	1251903lpsiFlhypothetical proteinl+
STM0385_1010_1044	0.33	-1.11	1251904lyaiClhypothetical proteinl+
STM0386_33_67	0.54	-1.04	1251905lproClpyrroline-5-carboxylate reductasel-
STM0387_161_195	0.77	-1.04	1251906yaillhypothetical proteinl+
STM0388_257_291	0.03	-3.18	1251907laroLlshikimate kinase III+
STM0389_13_47	0.18	-1.49	1251908yaiElhypothetical proteinl+
STM0390_25_59	0.01	-2.92	1251909laroMlhypothetical proteinl+
STM0391_153_187	0.72	1.09	1251910yaiElhypothetical proteinl+
STM0392_657_691	0.51	-1.18	1251911lrdgClrecombination associated proteinl-
STM0393_289_323	0.13	-1.32	1251912lyajFlfructokinasel+
STM0394_1038_1072	0.02	1.53	1251913larajJprotein AraJl-

STM0395_2702_2736	0.17	-1.29	1251914lsbcClexonuclease subunit SbcCl-
STM0396_844_878	0.43	1.11	1251915lsbcDlexonuclease subunit SbcDl-
STM0397_513_547	0.67	-1.09	1251916lphoBIDNA-binding response regulator in two-component regulatory system with PhoR (or CreC)l+
STM0398_1097_1131	0.23	-1.38	1251917lphoRlphosphate regulon sensor proteinl+
STM0399_977_1011	0.18	1.23	1251918lbrnQlbranched-chain amino acid transporterl+
STM0400_884_918	0.38	-1.05	1251919lproYlputative proline transporterl+
STM0401_1251_1285	0.96	-1.01	1251920lmalZlmaltodextrin glucosidasel+
STM0402_385_419	0.05	1.84	1251921lSTM0402lputative thiol-alkyl hydroperoxide reductasel-
STM0403_129_163	0.30	1.22	1251922lyajBlacyl carrier protein phosphodiesterasel-
STM0404_578_612	0.04	-2.22	1251923lqueAIS-adenosylmethionine:tRNA ribosyltransferase-isomerasel+
STM0405_961_995	0.55	-1.08	1251924ltgtlqueanine tRNA-ribosyltransferasel+
STM0406_273_307	0.02	-2.43	1251925lyajClpreprotein translocase subunit YajCl+
STM0407_1041_1075	0.01	-2.92	1251926lsecDlpreprotein translocase subunit SecDl+
STM0408_609_643	0.00	-2.04	1251927lsecFlpreprotein translocase subunit SecFl+
STM0409_65_99	0.24	1.19	1251928lSTM0409lhypothetical proteinl+
STM0410_81_115	0.00	-1.37	1251929lSTM0410lputative regulatory proteinl+
STM0411_289_323	0.08	1.54	1251930lyajDlhypothetical proteinl+
STM0412_93_127	0.39	1.16	2673775lSTM0412l-I-
STM0413_257_291	0.00	-4.46	1251932ltsxlnucleoside channel-
STM0414_325_359	0.02	1.28	1251933lyajllhypothetical proteinl-
STM0415_97_131	0.01	2.50	1251934lybaDlhypothetical proteinl+
STM0416_873_907	0.19	-1.18	1251935lribDlbifunctional diaminohydroxyphosphoribosylaminopyrimidine deaminase/5-amino-6-(5-phosphoribosylamino)uracil reductasel+
STM0417_353_387	0.94	-1.02	1251936lribHlriboflavin synthase subunit betal+
STM0418_121_155	0.29	1.17	1251937lnusBltranscription antitermination protein NusBl+
STM0419_849_883	0.17	-1.32	1251938lthiLlthiamine monophosphate kinasel+
STM0420_225_259	0.07	-1.33	1251939lpgpAlphosphatidylglycerophosphatase Al+
STM0421_917_951	0.07	-1.83	1251940lyajOlputative oxidoreductasel-
STM0422_1200_1234	0.10	-1.29	1251941ldxsl1-deoxy-D-xylulose-5-phosphate synthasel-
STM0423_225_259	0.03	-1.24	1251942lispAlgeranyltransterasel-
STM0424_33_67	0.02	-1.34	1251943lxseBlexodeoxyribonuclease VII small subunitl-
STM0425_482_516	0.06	-1.48	1251944lthillthiamine biosynthesis protein Thill+
STM0426_433_467	0.05	1.30	1251945lphnVI2-aminoethylphosphonate transporterl-
STM0427_375_409	0.49	-1.22	1251946lphnUI2-aminoethylphosphonate transporterl-
STM0428_719_753	0.26	1.14	1251947lphnTI2-aminoethylphosphonate transporterl-

STM0430_513_547	0.21	1.17	1251949lphnR 2-aminoethylphosphonate transport protein -
STM0431_281_315	0.73	1.06	1251950lphnW 2-aminoethylphosphonate transport +
STM0432_257_291	0.90	-1.01	1251951lphnX 2-aminoethylphosphonate transport +
STM0433_129_163	0.01	2.71	1251952lthiJ hypothetical protein -
STM0434_769_803	0.02	1.73	1251953lapbA 2-dehydropantoate 2-reductase -
STM0435_97_131	0.02	-1.78	1251954lyajQ nucleotide-binding protein +
STM0436.S_1006_1040	0.03	1.60	1251955lyajR putative transport protein -
STM0436A_89_123	0.10	1.25	1251956lSTM0436A I-
STM0438_769_803	0.02	2.14	1251958lSTM0438 tetratricopeptide repeat protein +
STM0439_849_883	0.03	2.38	1251959lcyoE protoheme IX farnesyltransferase -
STM0440_61_95	0.06	-1.76	1251960lcyoD cytochrome o ubiquinol oxidase subunit IV -
STM0441_229_263	0.00	-2.53	1251961lcyoC cytochrome o ubiquinol oxidase subunit III -
STM0442_1393_1427	0.01	-1.47	1251962lcyoB cytochrome o ubiquinol oxidase subunit II -
STM0443_129_163	0.00	-2.84	1251963lcyoA cytochrome o ubiquinol oxidase subunit III -
STM0444_1333_1367	0.03	1.22	1251964lampG muropeptide transporter -
STM0445_293_327	0.03	-1.81	1251965lyajG hypothetical protein -
STM0446_257_291	0.11	1.50	1251966lbolA transcriptional regulator BolA +
STM0447_1036_1070	0.19	1.54	1251967ltigl trigger factor +
STM0448_145_179	0.00	1.31	1251968lcipPI ATP-dependent Clp protease proteolytic subunit +
STM0449_273_307	0.06	-1.18	1251969lcipX ATP-dependent protease ATP-binding subunit +
STM0450_1708_1742	0.01	2.33	1251970llonl DNA-binding ATP-dependent protease Lal +
STM0451_225_259	0.00	-4.14	1251971lhupBl transcriptional regulator HU subunit betal +
STM0452_1577_1611	0.02	1.80	1251972lcypD peptidyl-prolyl cis-trans isomerase (rotamase D) +
STM0453_141_175	0.12	1.20	1251973lybaV putative DNA uptake protein +
STM0454_189_223	0.00	-3.79	1251974lybaW putative esterase +
STM0455_609_643	0.03	1.83	1251975lybaX queuosine biosynthesis protein QueCl -
STM0456_1422_1456	0.00	-2.92	1251976lybaE putative ABC transporter periplasmic binding protein -
STM0457_721_755	0.42	1.07	1251977lcof putative hydrolase +
STM0458_953_987	0.06	1.91	1251978lSTM0458 putative cysteine synthase/cystathionine beta-synthase -
STM0459_353_387	0.07	1.46	1251979lybaO putative transcriptional regulator +
STM0460_1342_1376	0.46	1.14	1251980lmdlA putative multidrug transporter membrane\ATP-binding components +
STM0461_1071_1105	0.26	-1.14	1251981lmdlB putative multidrug transporter membrane\ATP-binding components +
STM0461.1n_377_411	0.14	1.53	2673746lSTM0461.1n hypothetical protein -
STM0462_171_205	0.01	1.81	1251982lglnK nitrogen regulatory protein P-II 2 +

STM0463_1184_1218	0.03	1.40	1251983lamtBlammonium transporterl+
STM0464_225_259	0.02	1.70	1251984ltesBlacyl-CoA thioesterase III-
STM0465_17_51	0.05	1.67	1251985lybaYlhypothetical proteinl+
STM0466_342_376	0.51	-1.17	1251986lybaZlputative methyltransferasel-
STM0467_17_51	0.62	1.56	1251987lffslmisc_RNAI+
STM0468_656_690	0.18	-1.27	1251988lylaBlhypothetical proteinl-
STM0469_5_39	0.03	-12.11	1251989lrpmE2l50S ribosomal protein L31 type Bl+
STM0470_49_83	0.05	-4.97	1251990lrpmJl50S ribosomal protein L36l+
STM0471_289_323	0.00	2.54	1251991lylaClputative inner membrane proteinl-
STM0472_73_107	0.66	1.04	1251992lmaalmaltose O-acetyltransferasel-
STM0473_125_159	0.05	1.61	1251993lhhahemolysin expression-modulating proteinl-
STM0474_145_179	0.00	1.99	1251994lybaJlhypothetical proteinl-
STM0475_2623_2657	0.19	1.13	1251995lacrBlacridine efflux pumppl-
STM0476_211_245	0.10	1.33	1251996lacrAlacridine efflux pumppl-
STM0477_185_221	0.84	-1.02	1251997lacrRIDNA-binding transcriptional repressorl+
STM0478_2876_2910	0.28	-1.19	1251998laefAlpotassium efflux protein KefAl+
STM0479_585_619	0.05	1.58	1251999lSTM0479lputative transposasel-
STM0480_25_59	0.05	1.21	1252000lybaMlhypothetical proteinl-
STM0481_97_131	0.88	1.05	1252001lpriClprimosomal replication protein N''l-
STM0482_129_163	0.44	-1.14	1252002lybaNlhypothetical proteinl+
STM0483_289_323	0.02	-1.62	1252003lapladenine phosphoribosyltransferasel+
STM0484_1046_1080	0.54	-1.07	1252004ldnaXlDNA polymerase III subunits gamma and taul+
STM0485_5_40	0.87	1.02	1252005lybaBlhypothetical proteinl+
STM0486_197_231	0.60	1.31	1252006lrecRlrecombination protein RecRl+
STM0487.S_1420_1454	0.96	1.01	1252007lhtpGlheat shock protein 90l+
STM0488_129_163	0.01	-3.73	1252008ladkladenylate kinasel+
STM0489_321_355	0.21	1.12	1252009lhemHlferrochelatasel+
STM0490_673_707	0.01	-2.25	1252010laeslacetyl esterasel-
STM0491_1106_1140	0.00	-1.59	1252011lgsklinosine-guanosine kinasel+
STM0492_878_912	0.00	1.76	1252012lybaLlputative cation:proton antiport proteinl-
STM0493_238_272	0.59	-1.12	1252013lfsrlputative transport proteinl-
STM0494_1110_1144	0.03	-1.91	1252014lushAlbifunctional UDP-sugar hydrolase/5'-nucleotidase periplasmic precursorl+
STM0495_113_147	0.05	1.26	1252015lybaKlhypothetical proteinl-
STM0496_641_675	0.37	1.28	1252016lybaPlputative cytoplasmic proteinl-
STM0497_205_239	0.03	2.41	1252017lSTM0497lputative periplasmic proteinl-

STM0498_2447_2481	0.15	-1.79	1252018lcopAlcopper transporterl-
STM0499_353_387	0.01	2.11	1252019lcueRIDNA-binding transcriptional activator of copper-responsive regulon genesl+
STM0500_113_147	0.01	1.78	1252020lybbJlhypothetical proteinl-
STM0502_609_643	0.22	-1.19	1252022lybbLlputative ABC transporter ATP-binding protein YbbLi+
STM0503_177_211	0.07	1.27	1252023lybbMlputative transport proteinl+
STM0504_665_699	0.29	1.32	1252024lybbNlputative thioredoxin proteinl-
STM0505_129_163	0.16	-1.12	1252025lybbOlshort chain dehydrogenasel-
STM0506_433_467	0.07	-1.46	1252026ltesAlmultifunctional acyl-CoA thioesterase I and protease I and lysophospholipase L1l-
STM0507_73_107	0.00	2.24	1252027lybbAlputative ABC transporter ATP-binding protein YbbAl+
STM0508_1752_1786	0.02	1.39	1252028lybbPlputative inner membrane proteinl+
STM0509_935_969	0.79	-1.06	1252029lSTM0509lputative outer membrane proteinl+
STM0510_492_526	0.06	-1.43	1252030lsfbAlputative ABC-type transport system ATPase componentl+
STM0511_850_884	0.13	-1.23	1252031lsfbBlputative ABC-type transport system ATPase componentl+
STM0512_385_419	0.01	-2.26	1252032lsfbClputative ABC transporter permease componentl+
STM0513_300_334	0.01	1.64	1252033lybbBltRNA 2-selenouridine synthasel-
STM0516_641_675	0.21	1.15	1252036lallRIDNA-binding transcriptional repressorl+
STM0518_305_339	0.26	-1.47	1252038lgiplhydroxypyruvate isomerasel+
STM0522_987_1021	0.26	1.29	1252042lallPlallantoin permeasel+
STM0523_363_397	0.39	-1.30	1252043lallBlallantoinasel+
STM0525_1078_1112	0.03	2.82	1252045lglxKlglycerate kinase III+
STM0526_161_195	0.58	1.18	1252046lylbAlhypothetical proteinl-
STM0528_195_229	0.15	1.88	1252048lallDlureidoglycolate dehydrogenasel-
STM0529_1162_1196	0.05	1.18	1252049lfdrAlmembrane protein FdrAl+
STM0531_389_423	0.69	-1.04	1252051lylbFlputative cytoplasmic proteinl+
STM0533_853_887	0.01	-2.73	1252053lpurKlphosphoribosylaminoimidazole carboxylase ATPase subunitl-
STM0534_169_203	0.01	-4.50	1252054lpurElphosphoribosylaminoimidazole carboxylase catalytic subunitl-
STM0535_321_355	0.96	1.01	1252055lpxHlUDP-2 3-diacylglicosamine hydrolasel-
STM0536_361_395	0.09	-1.70	1252056lppiBlpeptidyl-prolyl cis-trans isomerase B (rotamase B)-l-
STM0537_515_549	0.07	1.25	1252057lcysSlcysteinyl-tRNA synthetasel+
STM0538_257_291	0.83	-1.05	1252058lSTM0538lputative outer membrane proteinl-
STM0539_377_411	0.16	-1.18	1252059lSTM0539lputative inner membrane proteinl-
STM0540_149_183	0.64	1.04	1252060lybcIlputative membrane-bound metal-dependent hydrolasel-
STM0541_152_187	0.05	1.25	1252061lybcJlhypothetical proteinl-

STM0542_609_643	0.07	1.26	1252062 folD bifunctional 5 10-methylene-tetrahydrofolate dehydrogenase/ 5 10-methylene-tetrahydrofolate cyclohydrolaseI-
STM0543_65_99	0.07	-2.16	1252063 fimA fimbrinI+
STM0545_218_252	0.02	2.45	1252065 fimC periplasmic chaperoneI+
STM0547_969_1003	0.04	-1.32	1252067 fimH minor fimbrial subunitI+
STM0550_41_75	0.13	1.37	1252070 fimY putative regulatory proteinI-
STM0552_167_201	0.02	1.39	1252072 fimW putative fimbrial proteinI-
STM0554_17_51	0.69	1.17	1252074 STM0554 integraseI-
STM0555_337_371	0.64	1.15	2673757 STM0555 pseudol-
STM0558_665_699	0.05	1.76	1252078 yfdH putative glycosyltransferaseI-
STM0559_257_291	0.71	1.14	1252079 lrfbII putative glycosyl translocaseI-
STM0559.T1_9_43	0.03	1.91	2673761 STM0559.T1 tRNAI+
STM0560_5_39	0.42	1.22	1252080 STM0560 pseudol-
STM0561_43_77	0.03	1.21	1252081 STM0561 sensor kinaseI-
STM0562_169_203	0.04	-1.26	2673759 STM0562 I-
STM0563_241_275	0.00	1.77	1252083 STM0563 putative transcriptional regulatorI-
STM0564_583_617	0.95	1.01	1252084 STM0564 pyridine nucleotide-disulfide oxidoreductaseI+
STM0565_65_99	0.76	1.07	1252085 STM0565 putative periplasmic proteinI-
STM0567_321_355	0.05	1.45	1252087 STM0567 putative DNA repair ATPaseI-
STM0568_1292_1326	0.94	-1.01	1252088 pheP phenylalanine transporterI+
STM0569_1017_1051	0.02	-1.37	1252089 ybdG hypothetical proteinI-
STM0570_1388_1422	0.15	-1.16	1252090 apeE outer membrane esteraseI+
STM0571_1731_1765	0.12	1.50	1252091 STM0571 putative inner membrane proteinI+
STM0572_849_883	0.16	-1.24	1252092 STM0572 putative phosphosugar isomeraseI-
STM0573_813_847	0.03	2.22	1252093 STM0573 putative inner membrane proteinI-
STM0575_113_147	0.14	1.52	1252095 STM0575 putative inner membrane proteinI-
STM0576_113_147	0.01	2.33	1252096 STM0576 putative PTS system mannose-specific enzyme IIABI-
STM0577_33_67	0.41	1.10	1252097 STM0577 putative PTS system mannose-specific enzyme IIABI-
STM0578_417_451	0.16	-1.48	1252098 lnfnB dihydropteridine reductaseI-
STM0579_117_151	0.33	1.08	1252099 ybdF hypothetical proteinI-
STM0580_345_379	0.01	-1.92	1252100 STM0580 putative regulatory proteinI-
STM0581_61_95	0.25	1.08	1252101 STM0581 putative regulatory proteinI+
STM0582_3_37	0.68	-1.11	1252102 ybdJ putative inner membrane proteinI-
STM0583_696_730	0.03	-1.29	1252103 ybdK putative cytoplasmic proteinI-
STM0584_513_547	0.72	-1.15	1252104 entD phosphopantetheinyltransferase component of enterobactin synthase multienzyme complexI-

STM0585_2025_2059	0.18	-1.44	1252105lfepAlouter membrane ferric enterobactin receptor precursorl-
STM0588_3318_3352	0.20	-1.37	1252108lfenterobactin synthase subunit Fl+
STM0589_394_428	0.06	1.97	1252109lfepElferric enterobactin/enterochelin transporterl+
STM0590_721_755	0.40	-1.17	1252110lfepCliron-enterobactin transporter ATP-binding proteinl-
STM0591_369_403	0.40	-1.13	1252111lfepGliron-enterobactin transporter permeasel-
STM0592_889_923	0.24	-1.22	1252112lfepDliron-enterobactin transporter membrane proteinl-
STM0593_310_344	0.87	-1.03	1252113lybdAlenterobactin exporter EntSl+
STM0594_225_259	0.16	-1.33	1252114lfepBliron-enterobactin transporter periplasmic binding proteinl-
STM0595_241_275	0.36	1.19	1252115lfentClisochorismate synthasel+
STM0596_992_1026	0.97	-1.01	1252116lfentElenterobactin synthase subunit El+
STM0597_769_803	0.01	1.42	1252117lfentBI2 3-dihydro-2 3-dihydroxybenzoate synthetasel+
STM0598_705_739	0.62	-1.07	1252118lfentAI2 3-dihydroxybenzoate-2 3-dehydrogenasel+
STM0599_187_221	0.23	-1.18	1252119lybdBhypothetical proteinl+
STM0600_1299_1333	0.00	-9.62	1252120lcstAlcarbon starvation proteinl+
STM0601_67_101	0.00	-5.90	1252121lybdDlputative cytoplasmic proteinl+
STM0602_938_972	0.01	15.08	1252122lybdHlputative glycerol dehydrogenasel-
STM0603_254_288	0.01	9.24	1252123lybdLlputative aminotransferasel+
STM0604_257_291	0.43	1.20	1252124lybdMlputative transcriptional regulatorl-
STM0605_773_807	0.07	2.22	1252125lybdNlputative 3'-phosphoadenosine 5'-phosphosulfate sulfotransferasel-
STM0606_681_715	0.02	2.18	1252126lybdOlputative transcriptional regulatorl-
STM0607_417_451	0.37	-1.11	1252127ldsbGldisulfide isomerase/thiol-disulfide oxidasel-
STM0608_65_99	0.99	-1.00	1252128lahpClalkyl hydroperoxide reductase subunit Cl+
STM0609_935_969	0.15	1.38	1252129lahpFlalkyl hydroperoxide reductase F52a subunitl+
STM0610_161_195	0.26	1.56	1252130ISTM0610lputative anaerobic dehydrogenase componentl+
STM0611_2113_2147	0.33	-1.11	1252131ISTM0611lputative oxidoreductase proteinl+
STM0612_201_235	0.19	-1.28	1252132ISTM0612lputative hydrogenase proteinl+
STM0613_725_759	0.20	-1.14	1252133ISTM0613lputative hydrogenase proteinl+
STM0614_209_243	0.05	1.66	1252134lybdQlputative universal stress proteinl-
STM0615_816_850	0.03	-1.37	1252135lybdRlputative dehydrogenasel+
STM0616_25_59	0.03	-1.63	1252136lrnklNucleoside diphosphate kinase regulatorl-
STM0617_497_531	0.01	2.83	1252137lrnalribonuclease II-
STM0618_1121_1155	0.53	-1.39	1252138lcitTlcitrate/succinate transport antiport proteinl-
STM0619_785_819	0.47	-1.14	1252139lcitGltriphasphoribosyl-dephospho-CoA synthasel-
STM0620_481_515	0.11	-1.21	1252140lcitXI2'-(5"-triphasphoribosyl)-3'-dephospho-CoA:apo-citrate lyasel-
STM0622_193_227	0.03	-1.25	1252142lcitElcitrate lyase beta chainl-

STM0624_798_832	0.49	1.07	1252144lcitClcitrate lyase synthetasel-
STM0625_711_745	0.01	-1.59	1252145ldpiBlsensory histidine kinasel+
STM0626_465_499	0.02	-1.42	1252146ldpiAIDNA-binding response regulator in two-component regulatory system with citAl+
STM0628_369_403	0.02	1.33	1252148lpagPlpalmitoyl transferase for Lipid Al+
STM0629_145_179	0.01	-2.83	1252149lcspElcold shock protein El+
STM0630_49_83	0.26	-1.16	1252150lccrBlcamphor resistance protein CrcBl-
STM0631_433_467	0.11	1.21	1252151lybeMlputative hydrolasel+
STM0632_91_125	0.07	1.64	1252152ltatEltwi arginine translocase protein El+
STM0633_617_651	0.19	-1.23	1252153llipAllipoyl synthetasel-
STM0634_257_291	0.04	-1.68	1252154lybeFlputative DNA-binding transcriptional regulatorl-
STM0635.S_273_307	0.00	2.02	1252155llipBllipoyltransferasel-
STM0636_81_115	0.09	-1.26	1252156lybeDlhypothetical proteinl-
STM0638_643_677	0.05	-1.29	1252158lrlpAlrare lipoprotein Al-
STM0639_426_460	0.71	1.08	1252159lmrdBlcell wall shape-determining proteinl-
STM0640_1223_1257	0.01	2.46	1252160lmrdAlpenicillin-binding protein 2l-
STM0641_45_79	0.31	1.20	1252161lybeAlhypothetical proteinl-
STM0642_129_163	0.01	2.54	1252162lybeBlhypothetical proteinl-
STM0643_229_263	0.20	1.12	1252163lcobClalpha ribazole-5'-P phosphatasel-
STM0644_240_274	0.02	-2.54	1252164lcobDlthreonine-phosphate decarboxylasel+
STM0645_65_99	0.00	-1.71	1252165lnadDlnicotinic acid mononucleotide adenyltransferasel-
STM0646_145_179	0.67	-1.07	1252166lhAIIDNA polymerase III subunit deltaI-
STM0647_329_363	0.02	-1.68	1252167lrlpBILPS-assembly lipoprotein RplBI-
STM0648_1720_1754	0.47	-1.17	1252168lleuSlleucyl-tRNA synthetasel-
STM0649.S_101_135	0.07	1.44	1252169ISTM0649.Slputative hydrolasel+
STM0651_305_339	0.07	1.45	1252171ISTM0651l2-keto-3-deoxygluconate permeasel+
STM0652_1442_1476	0.49	-1.24	1252172ISTM0652lputative sigma-54 dependent transcriptional regulatorl+
STM0653_5_39	0.01	-1.84	1252173lybeLlhypothetical proteinl+
STM0654_833_867	0.05	2.28	1252174lybeQltetratricopeptide repeat proteinl-
STM0655_289_323	0.20	-1.17	1252175lybeRlputative cytoplasmic proteinl+
STM0656_755_789	0.14	-1.37	1252176lybeSlputative molecular chaperonel+
STM0658_730_764	0.13	-1.15	1252178lybeVlputative molecular chaperonel+
STM0660_832_866	0.83	1.09	1252180ISTM0660lputative cytoplasmic proteinl-
STM0661_401_435	0.02	-2.14	1252181lrihAlribonucleoside hydrolase 1l-
STM0662_513_547	0.02	-1.99	1252182lgltLlglutamate/aspartate transporterl-
STM0663_321_355	0.01	-1.59	1252183lgltKlglutamate/aspartate transporterl-

STM0664_641_675	0.01	-1.35	1252184lglJlglutamate/aspartate transporterl-
STM0665_289_323	0.60	-1.06	1252185lglIlgIglutamate and aspartate transporter subunitl-
STM0666_1212_1246	0.00	1.27	1252186lIntlapolipoprotein N-acyltransferasel-
STM0667_129_163	0.04	-1.11	1252187lybeXlputative transport proteinl-
STM0668_401_435	0.32	1.18	1252188lybeYlhypothetical proteinl-
STM0669_727_761	0.45	-1.07	1252189lphoLlputative phosphate starvation-inducible proteinl-
STM0670_714_748	0.16	1.14	1252190lmiaBlrRNA modification proteinl-
STM0671_705_739	0.33	-1.16	1252191lubiF12-octaprenyl-3-methyl-6-methoxy-1 4-benzoquinol hydroxylasel+
STM0672_273_307	0.37	1.24	1252192lSTM0672lputative inner membrane proteinl-
STM0675/STM0679_2_36	0.02	-1.76	1252195/1252199lmetU/metTltRNAl-
STM0678_9_43	0.01	-2.65	1252198lIeuWltRNAl-
STM0680_1114_1148	0.01	1.70	1252200lasnBlaasparagine synthetase Bl-
STM0681_9_43	0.11	-1.14	1252201lnagDIUMP phosphatasel-
STM0682_862_896	0.05	1.63	1252202lnagCN-acetylglucosamine operon transcriptional repressorl-
STM0683_924_958	0.30	-1.15	1252203lnagAIN-acetylglucosamine-6-phosphate deacetylasel-
STM0684_689_723	0.07	-1.09	1252204lnagBglglucosamine-6-phosphate deaminasel-
STM0685_1498_1532	0.00	-2.26	1252205lnagEIN-acetyl glucosamine specific PTS system components IIABCII+
STM0686_1245_1279	0.89	-1.04	1252206lglnSlglutaminyl-tRNA synthetasel+
STM0687_728_762	0.03	-1.65	1252207lybfMlputative outer membrane proteinl+
STM0689_498_532	0.31	1.20	1252209lcitAlcitrate-proton symporterl-
STM0691_1197_1231	0.07	1.46	1252211lSTM0691ltricarballylate dehydrogenasel-
STM0692_297_331	0.57	-1.05	1252212lSTM0692lputative transcriptional regulatorl-
STM0693_257_291	0.28	1.14	1252213lfurlferric uptake regulatorl-
STM0694_385_419	0.06	1.35	1252214lfldAlflavodoxin FldAl-
STM0695_13_47	0.08	-1.32	1252215lybfElLexA regulated proteinl-
STM0696_137_171	0.70	-1.05	1252216lybfFlhypothetical proteinl-
STM0697_257_291	0.22	-1.17	1252217lseqAlreplication initiation regulator SeqAl+
STM0698_642_676	0.02	-2.02	1252218lpgmlphosphoglucomutasesel+
STM0699_305_339	0.27	-1.13	1252219lSTM0699lputative cytoplasmic proteinl-
STM0700_897_931	0.23	-1.16	1252220lpotElputrescine/ornithine antiporterl-
STM0702_129_163	0.26	1.09	1252222lkdpEIDNA-binding response regulator in two-component regulatory system with KdpDII-
STM0703_2262_2296	0.08	-1.31	1252223lkdpDsensor protein KdpDII-
STM0704_227_261	0.06	1.18	1252224lkdpClpotassium-transporting ATPase subunit Cl-
STM0705_1642_1676	0.47	1.13	1252225lkdpBlpotassium-transporting ATPase subunit Bl-

STM0707_48_86	0.01	1.93	1252227 STM0707 putative outer membrane proteinl-
STM0708_141_175	0.00	2.34	1252228 ybfAl putative periplasmic proteinl+
STM0709_551_585	0.20	-1.22	1252229 phrBl deoxyribodipyrimidine photolyasel+
STM0710_595_629	0.02	2.53	1252230 ybgHl putative POT family transport proteinl-
STM0711_169_203	0.13	-1.24	1252231 ybgI putative hydrolase-oxidasel+
STM0712_17_51	0.66	-1.17	1252232 ybgJl putative carboxylasel+
STM0713_593_627	0.19	-1.26	1252233 ybgKl putative carboxylasel+
STM0714_385_419	0.13	-1.23	1252234 ybgLl hypothetical proteinl+
STM0715_33_67	0.02	1.68	1252235 STM0715l putative cytoplasmic proteinl+
STM0716_493_527	0.03	2.82	1252236 STM0716l putative phage integrasel+
STM0717_301_335	0.83	1.02	1252237 STM0717l putative inner membrane proteinl+
STM0718_513_547	0.41	1.04	1252238 STM0718l putative cytoplasmic proteinl+
STM0719_602_636	0.02	2.31	1252239 STM0719l putative UDP-galactopyranose mutasel+
STM0721_775_809	0.51	1.19	1252241 STM0721l putative glycosyl transferasel+
STM0722_137_171	0.05	2.13	1252242 STM0722l putative ABC transporter permease proteinl+
STM0723_161_195	0.20	1.69	1252243 STM0723l putative ABC-type polysaccharide/polyol phosphate transport system ATPase componentl+
STM0725_33_67	0.04	2.91	1252245 STM0725l putative glycosyltransferasel+
STM0726_1673_1707	0.02	2.23	1252246 STM0726l putative glycosyl transferasel+
STM0727_100_135	0.04	-1.89	1252247 STM0727l putative cytoplasmic proteinl+
STM0728_545_579	0.94	1.01	1252248 neilendonuclease VIIII+
STM0729_960_994	0.14	1.16	1252249 abrBl putative transport proteinl-
STM0730_349_383	0.00	-4.30	1252250 gltA type II citrate synthasel-
STM0731_49_83	0.11	-1.58	1252251 STM0731l putative inner membrane proteinl+
STM0732_109_143	0.00	-14.72	1252252 sdhCl succinate dehydrogenase cytochrome b556 large membrane subunitl+
STM0733_49_83	0.00	-5.92	1252253 sdhDl succinate dehydrogenase cytochrome b556 small membrane subunitl+
STM0734_1664_1698	0.00	-7.14	1252254 sdhA succinate dehydrogenase flavoprotein subunitl+
STM0735_669_703	0.00	-10.77	1252255 sdhBl succinate dehydrogenase iron-sulfur subunitl+
STM0736_1867_1901	0.00	-8.11	1252256 kgd alpha-ketoglutarate decarboxylasel+
STM0737_754_788	0.00	-4.99	1252257 sucBld dihydrolipoamide acetyltransferasel+
STM0738_936_970	0.00	-12.44	1252258 sucC succinyl-CoA synthetase subunit betal+
STM0739_65_99	0.00	-8.47	1252259 sucD succinyl-CoA synthetase subunit alphal+
STM0740_586_620	0.87	-1.03	1252260 cydAl cytochrome d terminal oxidase polypeptide subunit II+
STM0741_701_735	0.34	1.14	1252261 cydBl cytochrome d terminal oxidase polypeptide subunit III+

STM0742_9_43	0.97	1.01	1252262lybgTlputative outer membrane lipoproteinl+
STM0743_9_43	0.07	1.30	1252263lybgElhypothetical proteinl+
STM0744_361_395	0.01	-1.40	1252264lybgClacyl-CoA thioester hydrolase YbgCl+
STM0745_169_203	0.04	-2.03	1252265ltolQlcolicin uptake protein TolQl+
STM0746_193_227	0.14	-1.46	1252266ltolRlcolicin uptake protein TolRl+
STM0747_1001_1035	0.89	-1.02	1252267ltolAlcell envelope integrity inner membrane protein TolAl+
STM0748_806_840	0.01	-1.80	1252268ltolBltranslocation protein TolBl+
STM0749_129_163	0.02	-2.58	1252269lpallpeptidoglycan-associated outer membrane lipoproteinl+
STM0750_193_227	0.15	-1.30	1252270lybgFlhypothetical proteinl+
STM0756_397_431	0.05	1.57	1252276lnadAlquinolinate synthetasel+
STM0757_17_51	0.04	1.21	1252277lpnuChnucleoside/purine/pyrimidine transporterl+
STM0758_833_867	0.33	1.17	1252278lybgRlzinc transporter ZitBl-
STM0759_225_259	0.04	2.05	1252279lybgSlhypothetical proteinl-
STM0760_166_200	0.01	-1.32	1252280laroGlphospho-2-dehydro-3-heoxyheptonate aldolasel+
STM0761_353_387	0.17	1.13	1252281ISTM0761lfumarate hydratasel-
STM0762_577_611	0.65	-1.07	1252282ISTM0762lfumarate hydratasel-
STM0763.s_769_803	0.13	-1.27	1252283ISTM0763.sltranscriptional regulatorl+
STM0764_769_803	0.03	2.34	1252284ISTM0764ltranscriptional regulatorl-
STM0767_1309_1343	0.03	1.70	1252287ldcoAlpseudol+
STM0769_65_99	0.37	-1.20	1252289ISTM0769lputative cytoplasmic proteinl+
STM0770_793_827	0.08	1.23	1252290ISTM0770lputative ABC transport proteinl+
STM0772_385_419	0.59	-1.09	1252292lgpmAlphosphoglyceromutasel-
STM0773_698_732	0.87	-1.03	1252293lgalMlaldose 1-epimerasel-
STM0774_918_952	0.59	1.02	1252294lgalKlgalactokinasel-
STM0775_688_722	0.76	1.04	1252295lgalTlgalactose-1-phosphate uridylyltransferasel-
STM0776_18_52	0.35	-1.12	1252296lgalEIUDP-galactose-4-epimerasel-
STM0777_801_835	0.02	2.41	1252297ISTM0777lputative inner membrane proteinl-
STM0778_757_791	0.14	-1.26	1252298lmodFlputative molybdenum transport ATP-binding protein ModFl-
STM0779_113_147	0.54	1.09	1252299lmodEIDNA-binding transcriptional dual regulatorl-
STM0780_21_55	0.11	1.72	1252300ISTM0780lhypothetical proteinl+
STM0781_545_579	0.02	1.90	1252301lmodAlmolybdate transporter periplasmic proteinl+
STM0782_593_627	0.00	-1.53	1252302lmodBImolybdate ABC transporter permease proteinl+
STM0783_180_214	0.38	-1.10	1252303lmodClmolybdate transporter ATP-binding proteinl+
STM0784_321_355	0.21	-1.25	1252304lybhAlpredicted hydrolasel-
STM0785_449_483	0.45	1.15	1252305lybhEl6-phosphogluconolactonasel+
STM0786_1181_1215	0.01	-3.38	1252306lybhClputative pectinesterasel-

STM0787_1137_1171	0.00	-2.95	1252307lhutllimidazolonepropionasel+
STM0788_785_819	0.01	-1.72	1252308lhutGlformimidoylglutamasel+
STM0789_129_163	0.00	-1.58	1252309lhutClhistidine utilization repressorl+
STM0790_798_832	0.01	-3.32	1252310lhutUlpsuedol+
STM0792_345_379	0.02	2.44	1252312lybhBlpredicted kinase inhibitorl-
STM0793_291_325	0.92	-1.03	1252313lbioAladenosylmethionine--8-amino-7-oxononanoate transaminasel-
STM0794_490_524	0.14	1.60	1252314lbioBlbiotin synthetasel+
STM0795_271_305	0.45	-1.17	1252315lbioFl8-amino-7-oxononanoate synthasel+
STM0796_360_394	0.07	1.57	1252316lbioClpredicted methyltransferasel+
STM0797_73_107	0.13	-1.72	1252317lbioDldithiobiотин synthetasel+
STM0798_1343_1377	0.68	-1.05	1252318luvrBlexcinuclease ABC subunit Bl+
STM0799.1N_97_131	0.02	2.06	2673729ISTM0799.1NI-l+
STM0800_2067_2101	0.03	1.43	1252320lslrPlleucine-rich repeat proteinl+
STM0801_385_419	0.03	-1.52	1252321lybhKlputative cytoplasmic proteinl-
STM0802_81_115	0.03	-1.43	1252322lmoaAlmolybdenum cofactor biosynthesis protein Al+
STM0803_65_99	0.30	-1.11	1252323lmoaBlmolybdopterin biosynthetic protein Bl+
STM0804_361_395	0.01	-1.45	1252324lmoaClmolybdenum cofactor biosynthesis protein Cl+
STM0805_33_67	0.07	-1.35	1252325lmoaDlmolybdopterin synthase small subunitl+
STM0806_97_131	0.24	-1.16	1252326lMoaElmolybdopterin synthase large subunitl+
STM0807_257_291	0.26	-1.11	1252327lybhLlputative permeasel+
STM0808_545_579	0.02	1.44	1252328lybhMlputative integral membrane proteinl+
STM0809_410_444	0.18	1.38	1252329ISTM0809lputative inner membrane proteinl+
STM0810_145_179	0.15	1.58	1252330ISTM0810lputative inner membrane proteinl+
STM0811_241_275	0.01	1.64	1252331lybhNlhypothetical proteinl-
STM0812_1011_1045	0.01	1.65	1252332lybhOlcardiolipin synthase 2l-
STM0814_63_97	0.00	-3.76	1252334lybhQlputative inner membrane proteinl+
STM0815_236_270	0.01	-1.51	1252335lybhRlputative transport proteinl-
STM0816_388_422	0.02	1.40	1252336lybhSlputative transport proteinl-
STM0817_1578_1612	0.64	-1.06	1252337lybhFlputative ABC-type multidrug transport system ATPase componentl-
STM0819_553_587	0.46	-1.07	1252339lybiHlputative DNA-binding transcriptional regulatorl-
STM0820_1134_1168	0.06	-1.30	1252340lrhIElATP-dependent RNA helicase RhIEl+
STM0821_1514_1548	0.13	1.64	1252341ldinGIATP-dependent DNA helicase DinGI+
STM0822_673_707	0.08	1.33	1252342lybiBlhypothetical proteinl+
STM0823_9_43	0.02	2.69	1252343lybiJlhypothetical proteinl-
STM0825_109_143	0.24	1.51	1252344lybillhypothetical proteinl-

STM0826_385_419	0.65	1.05	1252345lybiNlputative SAM-dependent methyltransferasel+
STM0827_1992_2026	0.33	-1.14	1252346lybiOlpredicted mechanosensitive channell-
STM0828_65_99	0.04	-1.21	1252347lglnQlglutamine ABC transporter ATP-binding proteinl-
STM0829_257_291	0.04	1.13	1252348lglnPlglutamine ABC transporter permease proteinl-
STM0830_481_515	0.04	1.66	1252349lglnHlglutamine ABC transporter periplasmic proteinl-
STM0831_369_403	0.01	2.76	1252350ldpslDNA starvation/stationary phase protection protein Dpsl-
STM0832_561_595	0.40	-1.10	1252351lybiFlthreonine and homoserine efflux systeml-
STM0833_393_427	0.01	5.22	1252352lompXlouter membrane protein Xl+
STM0835_97_131	0.04	-1.25	1252354lSTM0835lmanganese transport regulator MntRl+
STM0836_114_148	0.37	1.10	1252355lybiRlputative transporterl+
STM0838_1362_1396	0.01	-1.96	1252357lybiTlputative ABC transporter ATPase componentl+
STM0841_667_701	0.04	-1.38	1252360lybiUlputative cytoplasmic proteinl-
STM0842_553_587	0.86	1.03	1252361lybiV(1)lputative hydrolasel+
STM0844_449_483	0.05	2.06	1252363lpfElputative pyruvate formate lyase activating enzymel-
STM0845_193_227	0.20	1.37	1252364lmoeBlmolybdopterin biosynthesis protein MoeBl-
STM0846_931_965	0.71	1.06	1252365lmoeAlmolybdopterin biosynthesis protein MoeAl-
STM0847_577_611	0.12	-1.66	1252366lybiKIL-asparaginasel+
STM0848_1333_1367	0.02	-1.75	1252367lyliAlgutathione transporter ATP-binding proteinl+
STM0849_828_862	0.05	-1.60	1252368lyliBlputative ABC transporter periplasmic binding proteinl+
STM0850_677_711	0.24	-1.24	1252369lyliClputative ABC transporter periplasmic binding proteinl+
STM0851_465_499	0.02	-2.26	1252370lyliDlputative ABC transporter inner membrane componentl+
STM0852_1223_1257	0.03	-2.04	1252371lyliGlputative FeS oxidoreductasel-
STM0853_273_307	0.02	1.45	1252372lbssRlbiofilm formation regulatory protein BssRl+
STM0854_221_255	0.02	1.51	1252373lSTM0854lputative cytoplasmic proteinl+
STM0855_787_821	0.10	2.21	1252374lSTM0855lputative electron transfer protein beta subunitl+
STM0856_569_603	0.26	1.14	1252375lSTM0856lputative electron transfer protein alpha subunitl+
STM0857_949_983	0.89	1.01	1252376lSTM0857lputative acyl-CoA dehydrogenasel+
STM0858_991_1025	0.15	1.50	1252377lSTM0858lputative dehydrogenasel+
STM0859_481_515	0.05	2.08	1252378lSTM0859lputative transcriptional regulatorl-
STM0860_285_321	0.01	3.93	1252379lSTM0860lputative inner membrane proteinl-
STM0861_593_627	0.32	1.23	1252380lylliI-l+
STM0862_90_124	0.69	1.03	1252381lyliJlputative glutathione S-transferasel-
STM0863_556_590	0.03	1.80	1252382ldacCID-alanyl-D-alanine carboxypeptidase fraction Cl+
STM0864_345_379	0.77	1.08	1252383ldeoRIDNA-binding transcriptional repressorl-
STM0865_49_83	0.11	1.42	1252384lybjGlundecaprenyl pyrophosphate phosphatasel-
STM0866_810_844	0.41	-1.12	1252385lmdfAlmultidrug translocasel+

STM0867_145_179	0.00	1.51	1252386 STM0867 putative hydrolasel-
STM0868_213_247	0.07	-1.18	1252387 STM0868 putative transport protein/regulatorl-
STM0869_129_163	0.49	1.11	1252388 STM0869 putative regulatory proteinl+
STM0870_879_913	0.03	-1.10	1252389 STM0870 hypothetical proteinl-
STM0871_225_259	0.04	1.61	1252390 ybjM putative inner membrane proteinl+
STM0872_73_107	0.02	1.63	1252391 grxA glutaredoxin 1l-
STM0873_21_55	0.78	-1.04	1252392 ybjC predicted inner membrane proteinl+
STM0874_577_611	0.57	1.06	1252393 mdaA nitroreductase A l+
STM0876_321_355	0.27	-1.11	1252395 ybjN putative cytoplasmic proteinl+
STM0877_626_660	0.00	-2.43	1252396 potF putrescine transporter subunit: periplasmic-binding component of ABC superfamilyl+
STM0878_1039_1073	0.00	-2.36	1252397 potG putrescine transporter ATP-binding subunitl+
STM0879_209_243	0.20	-1.16	1252398 potH putrescine transporter subunit: membrane component of ABC superfamilyl+
STM0880_753_787	0.01	-1.84	1252399 potI putrescine transporter subunit: membrane component of ABC superfamilyl+
STM0881_353_387	0.09	1.20	1252400 ybjO putative inner membrane proteinl+
STM0882_756_790	0.03	-1.33	1252401 rumB 23S rRNA methyluridine methyltransferasel+
STM0884_761_795	0.78	-1.04	1252402 lulaA ascorbate-specific PTS system enzyme IICl+
STM0885_185_219	0.03	1.39	1252403 STM0885 putative inner membrane proteinl+
STM0886_745_779	0.04	1.37	1252404 STM0886 putative sulfatasel+
STM0887_129_163	0.01	1.46	1252405 artJ arginine transport system componentl-
STM0888_153_187	0.01	-2.06	1252406 artM arginine transporter permease subunit ArtMl-
STM0889_609_643	0.01	-1.61	1252407 artQ arginine transporter permease subunit ArtQl-
STM0890_433_467	0.00	-3.46	1252408 artT arginine transport systeml-
STM0891_513_547	0.01	-1.77	1252409 artP arginine transporter ATP-binding subunitl-
STM0892_401_435	0.99	1.00	1252410 ybjP predicted lipoproteinl-
STM0894_109_143	0.02	-2.04	1252412 STM0894 putative excisionasel-
STM0897_349_383	0.04	-1.33	1252415 STM0897 hypothetical proteinl-
STM0900_1129_1163	0.05	-2.03	1252419 STM0900 putative helicasel+
STM0901_865_899	0.37	-1.18	1252420 STM0901 putative phage DNA primasel+
STM0906_73_107	0.05	2.10	1252425 STM0906 hypothetical proteinl+
STM0907_73_107	0.25	1.33	1252426 STM0907 putative chitinasel+
STM0908_53_88	0.09	1.61	1252427 STM0908 hypothetical proteinl+
STM0909_321_355	0.14	-1.52	1252428 STM0909 hypothetical proteinl+
STM0910_1302_1336	0.15	-1.27	1252429 STM0910 hypothetical proteinl+

STM0912_1908_1942	0.59	-1.18	1252431 STM0912 ATP-dependent proteasel+
STM0913.2N_198_232	0.35	-1.23	2673767 STM0913.2N hypothetical proteinl+
STM0914_429_463	0.90	-1.02	1252433 STM0914 putative phage tail componentl+
STM0915_296_331	0.02	-1.33	1252434 STM0915 hypothetical proteinl+
STM0916.1N_365_399	0.50	-1.05	2673747 STM0916.1N hypothetical proteinl+
STM0921_249_283	0.45	-1.09	1252440 STM0921 putative minor tail proteinl+
STM0922_533_567	0.03	-1.60	1252441 STM0922 putative phage tail assembly proteinl+
STM0928_608_642	0.11	-1.57	1252447 nanH neuramidasesl-
STM0930_33_67	0.15	1.14	1252449 orfB hypothetical proteinl+
STM0931_321_355	0.34	-1.06	1252450 ybjR putative aminidasel+
STM0932_399_433	0.01	-1.45	1252451 STM0932 putative nucleoside-diphosphate-sugar epimerasel-
STM0933_467_501	0.09	1.16	1252452 ybjT putative nucleoside-diphosphate-sugar epimerasel-
STM0934_3_37	0.03	1.51	1252453 taA L-allo-threonine aldolase PLP-dependentl-
STM0935_1024_1058	0.09	1.41	1252454 poxB pyruvate dehydrogenasel-
STM0936_545_579	0.02	-1.66	1252455 hcrI HCP oxidoreductase NADH-dependentl-
STM0938_769_803	0.03	-1.18	1252457 ybjE putative inner membrane proteinl-
STM0939_916_950	0.01	-1.55	1252458 ybjD hypothetical proteinl+
STM0940_193_227	0.30	1.16	1252459 ybjX VirK-like proteinl-
STM0941_1016_1050	0.02	1.43	1252460 ybjY macrolide transporter subunit MacA l+
STM0942_1428_1462	0.04	1.61	1252461 ybjZ macrolide transporter ATP-binding /permease proteinl+
STM0943_105_139	0.00	-6.01	1252462 cspD stress response proteinl-
STM0944_248_282	0.08	-1.47	1252463 clpS ATP-dependent Clp protease adaptor protein ClpS l+
STM0945_1406_1440	0.11	-1.45	1252464 clpA ATP-dependent Clp protease ATP-binding subunitl+
STM0946/STM2471/STM303	0.07	-1.17	1252465/1253993/1254555/1255002/1255837 tnpA_1/tnpA_3/tnpA_4/tnpA_5/tnpA_6 transposasel+
STM0947_193_227	0.27	1.24	1252466 STM0947 putative integrasel-
STM0948_129_163	0.08	-1.57	1252467 STM0948 putative cytoplasmic proteinl-
STM0949_8_42	0.71	1.49	1252468 serW tRNA l-
STM0950_401_435	0.06	-1.72	1252469 STM0950 SISAl-
STM0952_833_867	0.00	1.67	1252471 STM0952 putative transcriptional regulatorl+
STM0953_65_99	0.32	1.10	1252472 infA translation initiation factor IF-1l-
STM0954_49_83	0.73	-1.10	1252473 STM0954 putative inner membrane proteinl-
STM0955_353_387	0.61	-1.04	1252474 laatlleucyl/phenylalanyl-tRNA--protein transferasel-
STM0956_1379_1413	0.02	-1.43	1252475 cydC cysteine/glutathione ABC transporter membrane/ATP-binding componentl-

STM0957_1632_1666	0.80	1.04	1252476lcyclcysteine/glutathione ABC transporter membrane/ATP-binding componentl-
STM0958_705_739	0.88	1.03	1252477ltrxBThioredoxin reductasel-
STM0959_353_387	0.02	-1.90	1252478llrpIleucine-responsive transcriptional regulatorl+
STM0960_3841_3875	0.02	-2.04	1252479lfntsKIDNA translocase FtsKl+
STM0961_321_355	0.05	-1.31	1252480llolAlouter-membrane lipoprotein carrier proteinl+
STM0962_1185_1219	0.01	-1.32	1252481lycaJlrecombination factor protein RarAl+
STM0963_550_584	0.16	1.37	1252482lserISlseryl-tRNA synthetasel+
STM0964_2342_2376	0.99	-1.00	1252483ldmsAlanaerobic dimethyl sulfoxide reductase subunit Al+
STM0965_583_617	0.86	-1.01	1252484ldmsBlanaerobic dimethyl sulfoxide reductase subunit Bl+
STM0966_417_451	0.00	2.35	1252485ldmsClanaerobic dimethyl sulfoxide reductase subunit Cl+
STM0969_1127_1161	0.02	1.14	1252487lycaMlputative amino-acid transporterl+
STM0970_161_195	0.01	2.26	1252488lpfAlpyruvate formate lyase-activating enzyme 1l-
STM0972_721_760	0.02	-1.40	1252490lSTM0972lSopD-like proteinl+
STM0973_2244_2278	0.83	-1.03	1252491lpfBlpyruvate formate lyase II-
STM0974_497_531	0.04	-1.48	1252492lfcAlformate transporterl-
STM0975_1482_1516	0.06	-1.35	1252493lycaOlputative cytoplasmic proteinl-
STM0976_317_351	0.17	-1.22	1252494lycaPlputative inner membrane proteinl+
STM0977_442_476	0.20	1.30	1252495lserClphosphoserine aminotransferasel+
STM0978_1053_1087	0.68	-1.13	1252496laroAl3-phosphoshikimate 1-carboxyvinyltransferasel+
STM0979_641_675	0.01	1.56	1252497lycaLlputative Zn-dependent proteasel+
STM0980_137_171	0.03	-1.80	1252498lcmklcytidylate kinasel+
STM0981_851_885	0.02	-1.79	1252499lrpsAl30S ribosomal protein S1l+
STM0982_232_266	0.56	1.11	1252500lihfBlntegration host factor subunit betal+
STM0984_1134_1168	0.02	-1.81	1252502lmsbAllipid transporter ATP-binding/permease proteinl+
STM0985_417_451	0.04	-1.62	1252503llpxKltetraacyldisaccharide 4'-kinasel+
STM0986_898_932	0.03	-1.28	1252504lycaQlputative cytoplasmic proteinl+
STM0987_83_117	0.24	1.21	1252505lycaRhypothetical proteinl+
STM0988_277_311	0.03	1.54	1252506lkdsBl3-deoxy-manno-octulosonate cytidyllyltransferasel+
STM0989_561_595	0.22	-1.13	1252507lSTM0989lhypothetical proteinl+
STM0990_132_167	0.02	-1.81	1252508lycbChypothetical proteinl-
STM0991_201_235	0.03	-1.48	1252509lsmtAlputative metallothionein SmtAl+
STM0992_372_406	0.03	-1.51	1252510lmukFlcondesin subunit Fl+
STM0993_321_355	0.01	-1.96	1252511lmukElcondesin subunit El+
STM0994_3804_3838	0.00	-3.30	1252512lmukBlcell division protein MukBl+
STM0995_1099_1133	0.00	1.91	1252513lycbBlhypothetical proteinl+

STM0996_109_143	0.04	-1.66	1252514lycbKlputative outer membrane proteinl+
STM0997_417_451	0.81	-1.05	1252515lycbLlputative metallo-beta-lactamase l+
STM0998_944_978	0.75	-1.08	1252516laspClaromatic amino acid aminotransferasel-
STM0999_285_319	0.01	2.61	1252517lompFlouter membrane protein F precursor l-
STM1000_1338_1372	0.02	1.82	1252518lasnClasparaginyl-tRNA synthetasel-
STM1001_281_315	0.00	-1.87	1252519lSTM1001lputative leucine response regulatorl-
STM1003_694_728	0.02	-1.97	1252521lSTM1003lputative transcriptional regulatorl+
STM1004_476_510	0.06	-1.11	1252522lpncBlnicotinate phosphoribosyltransferasel-
STM1005_1062_1096	0.12	1.44	1252523lSTM1005lntegrasel-
STM1006_145_179	0.10	1.91	1252524lSTM1006lexcisionasel-
STM1009/STM2632_2759_2	0.00	1.91	1252527/1254155lSTM1009/STM2632lexodeoxyribonuclease l-
STM1010_127_161	0.10	1.35	1252528lSTM1010lhypothetical proteinl-
STM1010.1n_122_156	0.25	1.37	2673727lSTM1010.1nlhypothetical proteinl-
STM1011_144_178	0.01	1.95	1252529lSTM1011lhypothetical proteinl-
STM1012/STM2628_67_101	0.12	1.37	1252530/1254151lSTM1012/STM2628probable regulatory proteinl-
STM1013/STM2627_57_91	0.04	1.84	1252531/1254150lSTM1013/STM2627probable regulatory proteinl+
STM1014/STM2626_257_29	0.03	-1.24	1252532/1254149lSTM1014/STM2626probable regulatory proteinl+
STM1015/STM2625_577_61	0.50	1.05	1252533/1254148lSTM1015/STM2625lputative replication proteinl+
STM1016/STM2624_193_22	0.01	-1.47	1252534/1254147lSTM1016/STM2624lhypothetical proteinl+
STM1017/STM2623_129_16	0.03	-1.29	1252535/1254146lSTM1017/STM2623lhypothetical proteinl+
STM1018_60_99	0.02	1.44	1252536lSTM1018lhypothetical proteinl+
STM1020_159_194	0.02	1.54	1252538lSTM1020lhypothetical proteinl+
STM1021_432_466	0.01	2.68	1252539lSTM1021lhypothetical proteinl+
STM1021.1n_77_111	0.02	1.19	2673724lSTM1021.1nlhypothetical proteinl+
STM1022_673_707	0.96	-1.00	1252540lSTM1022lputative molecular chaperonel+
STM1023_225_259	0.16	-1.32	1252541lSTM1023lhypothetical proteinl+
STM1024_5_39	0.18	1.49	1252542lSTM1024lhypothetical proteinl+
STM1025_385_419	0.04	2.05	1252543lSTM1025lhypothetical proteinl-
STM1026_166_200	0.09	1.35	1252544lSTM1026lhypothetical proteinl-
STM1027_80_114	0.06	1.96	1252545lSTM1027lhypothetical proteinl+
STM1028_141_175	0.05	1.20	1252546lSTM1028lysozymel+
STM1029_83_117	0.07	1.61	1252547lSTM1029lhypothetical proteinl+
STM1030_145_179	0.87	-1.02	1252548lSTM1030lhypothetical proteinl+
STM1031_1332_1366	0.01	-1.41	1252549lSTM1031lhypothetical proteinl+
STM1032_603_637	0.01	-1.64	1252550lSTM1032lhypothetical proteinl+
STM1033_1083_1117	0.43	-1.08	1252551lSTM1033lCip protease-like proteinl+

STM1034_49_83	0.04	1.77	1252552 STM1034 putative RecA/RadA recombinase +
STM1035_33_67	0.11	1.61	1252553 STM1035 ATP-binding sugar transporter-like protein +
STM1036_249_283	0.74	-1.07	1252554 STM1036 probable minor tail protein +
STM1037_366_400	0.02	-1.11	1252555 STM1037 probable minor tail protein +
STM1038_9_43	0.08	-1.20	1252556 STM1038 probable major tail protein +
STM1039_49_83	0.48	1.13	1252557 STM1039 probable minor tail protein +
STM1040_229_263	0.03	-1.72	1252558 STM1040 probable minor tail protein +
STM1041_2677_2711	0.17	-1.20	1252559 STM1041 probable minor tail protein +
STM1042_226_260	0.03	1.67	1252560 STM1042 probable minor tail protein +
STM1043_191_225	0.65	1.04	1252561 STM1043 attachment/invasion protein +
STM1044_429_463	0.00	3.26	1252562 sodC superoxide dismutase precursor -
STM1045_301_335	0.04	-1.39	1252563 STM1045 probable minor tail protein +
STM1046_225_259	0.02	-1.44	1252564 STM1046 probable tail assembly protein +
STM1047_341_375	0.10	-1.15	1252565 STM1047 probable tail assembly protein +
STM1048_2217_2251	0.18	1.25	1252566 STM1048 host specificity protein JI +
STM1048.1N_717_751	0.66	1.08	2673720 STM1048.1N hypothetical protein +
STM1049_1520_1554	0.20	1.13	1252567 STM1049 probable tail fiber protein +
STM1050_329_364	0.03	1.82	1252568 STM1050 tail fiber assembly like-protein +
STM1051_433_467	0.00	3.37	1252569 sell secreted effector protein +
STM1052_121_155	0.02	3.47	1252570 STM1052 pseudol +
STM1053_129_163	0.04	1.28	1252571 STM1053 hypothetical protein -
STM1054_228_263	0.02	1.64	1252572 STM1054 hypothetical protein -
STM1055_105_139	0.07	1.39	1252573 STM1055 hypothetical protein -
STM1056_57_91	0.01	1.34	1252574 STM1056 MsgA-like protein -
STM1057_2446_2480	0.13	1.26	1252575 pepN aminopeptidase N +
STM1058_68_102	0.06	-1.28	1252576 pyrD dihydroorotate dehydrogenase 2I +
STM1059_345_379	0.91	-1.02	1252577 ycbW putative cytoplasmic protein +
STM1060_895_929	0.01	1.38	1252578 STM1060 putative iron-sulfur protein -
STM1061_1366_1400	0.07	1.50	1252579 ycbY putative N6-adenine-specific DNA methylase +
STM1062_1229_1263	0.03	-1.51	1252580 uuupl ABC transporter ATPase component +
STM1063_1183_1217	0.08	1.90	1252581 pqqAl paraquat-inducible protein A +
STM1064_1522_1556	0.04	2.65	1252582 pqqBl paraquat-inducible protein B +
STM1065_73_107	0.03	-1.18	1252583 ymbA putative outer membrane protein +
STM1066_81_115	0.20	1.30	1252584 rmf ribosome modulation factor +
STM1067_449_483	0.01	-2.29	1252585 fabA13-hydroxydecanoyl-(acyl carrier protein) dehydratase -
STM1068_1594_1628	0.02	-1.17	1252586 lonH putative protease -

STM1069_281_315	0.10	1.32	1252587lycbGhypothetical proteinl+
STM1071_401_435	0.22	1.28	1252589lsulAISOS cell division inhibitorl-
STM1072_113_147	0.00	-2.26	1252590lyccRlputative DNA transformation proteinl+
STM1073_1427_1461	0.92	-1.01	1252591lyccSlputative transporterl-
STM1074_289_323	0.13	1.45	1252592lyccFlhypothetical proteinl-
STM1075_1280_1314	0.12	1.46	1252593helDIDNA helicase IVl+
STM1076_321_355	0.02	-1.70	1252594lmgmAImethylglyoxal synthasel-
STM1077_497_531	0.98	1.00	1252595lyccTlhypothetical proteinl-
STM1078_119_153	0.84	1.03	1252596lSTM1078lputative cytoplasmic proteinl+
STM1079_81_115	0.16	1.24	1252597lyccVlputative inner membrane proteinl-
STM1080_853_887	0.28	1.25	1252598lyccWlputative SAM-dependent methyltransferasel-
STM1081_257_291	0.08	1.83	1252599lSTM1081lputative outer membrane proteinl+
STM1082_457_491	0.89	-1.02	1252600lSTM1082lbacterial regulatory proteinl+
STM1083_241_275	0.14	1.11	1252601lyccXlputative phosphohydrolasel+
STM1084_235_269	0.29	-1.15	1252602lyccKlsulfurtransferase TusEl-
STM1085_561_595	0.00	8.43	1252603lyccAlhypothetical proteinl-
STM1086_35_69	0.75	1.49	1252604lserTltRNAl+
STM1087_5_39	0.07	1.33	1252605lpipAlpathogenicity island-encoded protein Al-
STM1089_259_293	0.08	1.19	1252607lSTM1089lputative inner membrane proteinl+
STM1090_129_163	0.02	-1.46	1252608lpipClpathogenicity island-encoded protein Cl-
STM1092_125_159	0.05	-1.76	1252610lorfXlputative cytoplasmic proteinl+
STM1093_37_71	0.00	-7.71	1252611lSTM1093lputative cytoplasmic proteinl-
STM1095_1262_1296	0.23	1.21	1252613lcopSlcopper resistance proteinl-
STM1096_357_391	0.68	1.11	1252614lcopRltranscriptional regulatory protein YedWl-
STM1097_157_191	0.02	1.76	1252615lSTM1097lhypothetical proteinl+
STM1098_353_387	0.13	1.23	1252616lhpаСl4-hydroxyphenylacetate catabolisml-
STM1100_225_259	0.02	1.85	1252618lhpаБl4-hydroxyphenylacetate catabolisml-
STM1106_209_243	0.03	-1.61	1252624lhpаДl4-hydroxyphenylacetate catabolisml+
STM1107_962_996	0.02	-1.91	1252625lhpаШl4-hydroxyphenylacetate catabolisml+
STM1108_769_803	0.02	1.98	1252626lhpаАl4-hydroxyphenylacetate catabolisml+
STM1109_577_611	0.96	-1.00	1252627lSTM1109lputative periplasmic proteinl+
STM1110_33_67	0.09	2.63	1252628lSTM1110lhypothetical proteinl-
STM1111_97_131	0.05	-1.46	1252629lyccDlchaperone-modulator protein CbpMl-
STM1112_193_227	0.14	-1.16	1252630lcbpAlcurved DNA-binding protein CbpAl-
STM1113_41_76	0.60	1.07	1252631lscsAls suppression of copper sensitivity protein Al+
STM1114_1016_1050	0.74	1.12	1252632lscsBls suppression of copper sensitivity proteinl+

STM1116_53_87	0.06	-1.18	1252634 scsD suppression of copper sensitivity protein +
STM1117_307_341	0.00	-7.81	1252635 agp glucose-1-phosphatase/inositol phosphatase +
STM1118_129_163	0.41	1.13	1252636 yccJ hypothetical protein -
STM1119_81_115	0.28	-1.15	1252637 wraB TrpR binding protein WrbA -
STM1120_19_53	0.08	1.53	1252638 ycdF pseudol +
STM1121_95_129	0.02	3.35	1252639 ymdF putative cytoplasmic protein +
STM1122_481_515	0.10	-1.46	1252640 ycdC putative transcriptional repressor +
STM1123_33_67	0.01	-2.86	1252641 STM1123 putative periplasmic protein -
STM1124_3228_3262	0.05	-2.49	2673752 putA -l-
STM1125_798_832	0.01	-1.89	1252643 putP major sodium/proline symporter +
STM1126_449_483	0.01	-1.43	2673763 phoH -l+
STM1127_129_163	0.00	1.88	1252645 STM1127 putative transcriptional regulator -
STM1128_1298_1332	0.45	-1.10	1252646 STM1128 putative sodium/glucose cotransporter -
STM1129_33_67	0.08	-1.18	1252647 STM1129 N-acetylmannosamine-6-phosphate 2-epimerase -
STM1130_706_740	0.03	1.99	1252648 STM1130 putative inner membrane protein +
STM1131_57_91	0.66	-1.10	1252649 STM1131 putative outer membrane protein +
STM1132_482_516	0.89	1.02	1252650 STM1132 putative sialic acid transporter +
STM1133_108_142	0.18	1.18	1252651 STM1133 putative dehydrogenase +
STM1134_12_46	0.73	1.44	1252652 serX tRNA -
STM1135_769_803	0.01	1.74	1252653 ycdW putative oxidoreductase +
STM1136_33_67	0.46	-1.07	1252654 ycdX putative hydrolase +
STM1137_81_115	0.51	-1.08	1252655 ycdY putative oxidoreductase component +
STM1138_189_223	0.02	1.84	1252656 ycdZ putative inner membrane protein +
STM1139_353_387	0.56	1.03	1252657 csgG putative curli operon transcriptional regulator -
STM1141_94_128	0.01	-1.45	1252659 csgE curli assembly protein CsgE -
STM1142_345_379	0.04	-1.38	1252660 csgD DNA-binding transcriptional activator in two-component regulatory system -
STM1143_129_163	0.13	-1.31	1252661 csgB curlin minor subunit +
STM1144_209_243	0.01	2.41	1252662 csgA cryptic curlin major subunit +
STM1145_81_115	0.03	3.41	1252663 csgC putative curli production protein precursor +
STM1146_241_275	0.03	2.47	1252664 ymdA putative periplasmic protein +
STM1147_209_243	0.02	1.60	1252665 STM1147 hypothetical protein +
STM1148.S_1129_1163	0.35	1.10	1252666 ymdC putative phospholipase +
STM1149_808_842	0.67	-1.05	1252667 lmdoC glucans biosynthesis protein -
STM1150_793_827	0.17	-1.21	1252668 lmdoG glucan biosynthesis protein G +
STM1151_2089_2123	0.05	-1.18	1252669 lmdoH glucosyltransferase MdoH +

STM1152_129_163	0.19	-1.29	1252670lyceKlpredicted lipoproteinl+
STM1153_65_99	0.01	-2.02	1252671lmsyBlhypothetical proteinl-
STM1154_760_794	0.76	1.04	1252672lyceEldrug efflux system protein MdtGl-
STM1155_457_491	0.31	1.07	1252673lhtrBllipid A biosynthesis lauroyl acyltransferasel-
STM1156_758_792	0.03	-2.18	1252674lyceAlhypothetical proteinl+
STM1157_353_387	0.33	-1.11	1252675lycellhypothetical proteinl-
STM1158_97_131	0.09	1.21	1252676lSTM1158lputative inner membrane proteinl-
STM1159_61_95	0.04	1.46	1252677lyceOlputative inner membrane proteinl-
STM1160_504_538	0.87	1.04	1252678lso1AIN-methyltryptophan oxidasel-
STM1161.S_53_87	0.85	1.01	1252679lbssSlbiofilm formation regulatory protein BssSl-
STM1162_7_41	0.54	1.05	1252680ldinlIDNA damage-inducible protein ll-
STM1163_208_242	0.02	-1.66	1252681lpyrCldihydroorotasel-
STM1164_37_71	0.04	1.52	1252682lyceBlpredicted lipoproteinl-
STM1165_457_491	0.54	-1.15	1252683lgrxBllglutaredoxin 2l-
STM1166_690_724	0.04	-1.31	1252684lyceLlmultidrug resistance protein MdtHl-
STM1167_401_435	0.00	-2.08	1252685lrimJlribosomal-protein-S5-alanine N-acetyltransferasel+
STM1168_385_419	0.17	-1.44	1252686lyceHlhypothetical proteinl+
STM1169_65_99	0.09	1.31	1252687lmviMlputative virulence proteinl+
STM1170_1152_1186	0.62	-1.10	1252688lmviNlputative virulence proteinl+
STM1171_13_47	0.41	1.21	1252689lfIgNlputative FlgK/FlgL export chaperonel-
STM1172_257_291	0.11	1.48	1252690lfIgMlanti-sigma28 factor FlgMl-
STM1173_129_163	0.95	1.02	1252691lfIgAlflagellar basal body P-ring biosynthesis protein FlgAl-
STM1175_289_323	0.49	1.20	1252693lfIgClflagellar basal body rod protein FlgCl+
STM1181_163_197	0.74	-1.04	1252699lfIgllflagellar basal body P-ring proteinl+
STM1183_1239_1273	0.01	-2.29	1252701lfIgKlflagellar hook-associated protein FlgKl+
STM1184_225_259	0.95	1.01	1252702lfIgLlflagellar hook-associated protein FlgLl+
STM1185_2877_2911	0.02	-1.70	1252703lrlenribonuclease El-
STM1186_121_155	0.16	1.38	1252704lSTM1186lpseudol+
STM1187_737_771	0.08	-1.26	1252705lrluCl23S rRNA pseudouridylate synthase Cl+
STM1188_333_367	0.20	-1.43	1252706lSTM1188lputative inner membrane lipoproteinl+
STM1189_391_425	0.09	-1.54	1252707lmafMaf-like proteinl-
STM1190_225_259	0.02	-2.30	1252708lyceDlhypothetical proteinl+
STM1191_139_173	0.06	-2.19	1252709lrpmFI50S ribosomal protein L32l+
STM1192_633_667	0.64	1.11	1252710lplsXlfatty acid/phospholipid synthesis proteinl+
STM1193_289_323	0.28	1.17	1252711lfabHI3-oxoacyl-(acyl carrier protein) synthase IIIl+
STM1194_673_707	0.03	1.29	1252712lfabDlacyl carrier protein S-malonyltransferasel+

STM1195_257_291	0.14	-1.38	1252713lfabGI3-ketoacyl-(acyl-carrier-protein) reductasel+
STM1196_202_236	0.54	-1.09	1252714lacpPlacyl carrier proteinl+
STM1197_1075_1109	0.68	-1.08	1252715lfabFI3-oxoacyl-(acyl carrier protein) synthase IIIl+
STM1198_65_99	0.01	1.44	1252716lpabCI4-amino-4-deoxychorismate lyasel+
STM1199_760_794	0.13	1.42	1252717lyceGhypothetical proteinl+
STM1200_161_195	0.20	-1.25	1252718ltdklthymidylate kinasel+
STM1201_646_680	0.99	1.00	1252719lholtDNA polymerase III subunit delta'l+
STM1202_353_387	0.02	1.46	1252720lycfHpredicted metallodependent hydrolasel+
STM1203_1011_1045	0.02	-1.81	1252721lptsGglucose-specific PTS system IIBC componentsl+
STM1204_2008_2042	0.01	2.07	1252722lfhuElferric-rhodotorulic acid outer membrane transporterl-
STM1205_225_259	0.03	-1.31	1252723lycfIpurine nucleoside phosphoramidasel+
STM1206_173_207	0.40	-1.16	1252724lycfIputative outer membrane lipoproteinl+
STM1207_593_627	0.02	-1.41	1252725lycfMliputative outer membrane lipoproteinl+
STM1209_91_125	0.12	-1.15	1252727lnagZlbeta-hexosaminidasel+
STM1210_65_99	0.13	-1.31	1252728lycfPlhypothetical proteinl+
STM1211_1170_1204	0.01	2.26	1252729lndhlrespiratory NADH dehydrogenase 2l+
STM1212_65_99	0.62	1.05	1252730lycfJlhypothetical proteinl+
STM1213_63_97	0.00	2.42	1252731lycfQliputative transcriptional repressorl-
STM1214_21_55	0.00	12.69	1252732lycfRliputative outer membrane proteinl+
STM1215_673_707	0.02	1.44	1252733lycfSlputative periplasmic proteinl-
STM1216_2640_2674	0.79	1.02	1252734lmfdltranscription-repair coupling factorl-
STM1217.S_537_571	0.03	-1.35	1252735lycfUlouter membrane-specific lipoprotein transporter subunit LolCl+
STM1218_49_83	0.00	-1.61	1252736lolDlipoprotein transporter ATP-binding subunitl+
STM1219_758_792	0.02	-2.12	1252737lycfWlouter membrane-specific lipoprotein transporter subunit LolEl+
STM1220_449_483	0.00	-2.06	1252738lycfXIN-acetyl-D-glucosamine kinasel+
STM1221_3_37	0.24	-1.16	1252739lcobBINAD-dependent deacetylasel+
STM1222_912_946	0.10	-2.13	1252740lpotDlspermidine/putrescine ABC transporter periplasmic substrate-binding proteinl-
STM1223_145_179	0.62	1.11	1252741lpotClspermidine/putrescine ABC transporter membrane proteinl-
STM1224_796_830	0.06	1.78	1252742lsifAlsecreted effector proteinl-
STM1225_649_683	0.37	-1.07	1252743lpotBlspermidine/putrescine ABC transporter membrane proteinl-
STM1226_650_684	0.19	1.21	1252744lpotAlputrescine/spermidine ABC transporter ATPase proteinl-
STM1227_519_553	0.01	-2.34	1252745lpepTlpeptidase Tl+
STM1228_432_466	0.88	-1.04	1252746lSTM1228lputative periplasmic proteinl+
STM1229_667_701	0.03	-1.28	1252747lycfDliputative cytoplasmic proteinl-
STM1230_1009_1043	0.19	1.43	1252748lphoQlsensor protein PhoQl-

STM1231_65_99	0.01	2.37	1252749lphoPIDNA-binding response regulator in two-component regulatory system with PhoQI-
STM1232_1332_1366	0.01	-2.16	1252750lpurBladenylosuccinate lyasel-
STM1233_313_347	0.55	-1.12	1252751lycfClhypothetical proteinl-
STM1234.S_940_974	0.02	-2.11	1252752ltrmUltRNA (5-methylaminomethyl-2-thiouridylate)-
STM1235_290_325	0.90	-1.02	1252753lymfBlputative MutT-like proteinl-
STM1236_33_67	0.48	-1.06	1252754lSTM1236lputative periplasmic proteinl-
STM1237_305_339	0.07	-1.30	1252755lymfClputative ribosomal large subunit pseudouridine synthasel-
STM1238_908_942	0.02	-2.11	1252756licdAlisocitrate dehydrogenasel+
STM1239_502_536	0.91	-1.02	1252757lSTM1239lputative cytoplasmic proteinl+
STM1240_49_83	0.07	1.96	1252758lenvFlputative envelope lipoproteinl-
STM1241.1N_42_76	0.84	1.02	2673773lSTM1241.1NI-l+
STM1241_17_51	0.16	1.46	1252759lmsgAlmacrophage survival proteinl-
STM1242_353_387	0.01	1.79	1252760lenvElputative envelope proteinl-
STM1244_201_235	0.04	3.16	1252762lpagDlvirulence protein PAGD precursorl-
STM1246_464_498	0.01	9.88	1252764lpagClvirulence membrane protein PAGC precursorl+
STM1247_35_69	0.56	-1.44	1252765lSTM1247ltRNAl+
STM1248_117_151	0.00	-3.38	1252766lSTM1248lpseudol+
STM1249_165_199	0.71	-1.04	1252767lSTM1249lputative periplasmic proteinl-
STM1250_145_179	0.07	1.63	1252768lSTM1250lputative cytoplasmic proteinl+
STM1251_145_179	0.03	2.97	1252769lSTM1251lputative molecular chaperonl+
STM1252_973_1007	0.04	2.13	1252770lSTM1252lputative cytoplasmic proteinl+
STM1253_21_55	0.14	1.50	1252771lSTM1253lputative inner membrane proteinl-
STM1254_65_99	0.16	1.54	1252772lSTM1254lputative outer membrane lipoproteinl-
STM1256_385_419	0.48	1.06	1252774lSTM1256lputative ABC transporter proteinl+
STM1257_737_771	0.24	-1.07	1252775lSTM1257lputative ABC transporter proteinl+
STM1259_65_99	0.25	-1.19	1252777lSTM1259lputative ABC-type transport system ATPase componentl+
STM1260_327_361	0.03	1.36	1252778lSTM1260lputative inner membrane proteinl-
STM1261_115_149	0.26	-1.18	1252779lSTM1261lputative cytoplasmic proteinl+
STM1262_3_37	0.09	-1.43	1252780lSTM1262ltRNAl+
STM1263_609_643	0.02	-4.52	1252781lSTM1263lhypothetical proteinl+
STM1264_65_99	0.03	-1.45	1252782laadAlaminoglycoside adenyltransferasel+
STM1265_501_535	0.99	1.00	1252783lSTM1265lputative response regulatorl+
STM1266_641_675	0.32	-1.13	1252784lSTM1266lputative transcriptional regulatorl+
STM1267_97_131	0.03	-2.34	1252785lSTM1267lputative cytoplasmic proteinl-
STM1269_353_387	0.07	1.37	1252787lSTM1269lchorismate mutasel+

STM1270_353_389	0.01	-1.18	1252788lyeaSIleucine export protein LeuEl+
STM1271_65_99	0.01	1.25	1252789lyeaRlputative cytoplasmic proteinl+
STM1272_21_55	0.03	1.27	1252790lyoaGlputative cytoplasmic proteinl+
STM1273_449_483	0.11	1.90	1252791lSTM1273lputative nitric oxide reductasel+
STM1274_113_147	0.99	-1.00	1252792lyeaQlhypothetical proteinl+
STM1275_193_227	0.01	2.27	1252793lyaoFlputative hemolysinl+
STM1276_129_163	0.02	1.28	1252794lSTM1276lputative periplasmic proteinl+
STM1277_273_307	0.03	1.54	1252795lyeaOlputative cytoplasmic proteinl-
STM1278_346_380	0.15	-1.34	1252796lyeaNlputative amino acid/amine transport proteinl-
STM1279_689_723	0.00	1.81	1252797lyeaMlputative regulatory proteinl+
STM1280_145_179	0.28	-1.10	1252798lyeaLlputative inner membrane proteinl-
STM1281_5_39	0.02	1.78	1252799lSTM1281lputative inner membrane proteinl+
STM1282_73_107	0.01	2.88	1252800lyeaKlputative cytoplasmic proteinl-
STM1283_1295_1329	0.09	1.32	1252801lyeaJlputative methyl-accepting chemotaxis proteinl-
STM1285_1416_1450	0.60	-1.06	1252803lyeaGlputative serine protein kinasel-
STM1286_673_707	0.01	-2.54	1252804lmipAlMltA-interacting protein Al+
STM1287_358_392	0.13	1.26	1252805lSTM1287larylsulfatase regulatorl+
STM1288_609_643	0.48	-1.12	1252806lSTM1288lputative aldehyde reductasel+
STM1289_609_643	0.96	-1.00	1252807lyeaDlaldose 1-epimerasel-
STM1290_801_835	0.01	-1.82	1252808lgapAlgyceraldehyde-3-phosphate dehydrogenasel-
STM1291_289_323	0.00	-3.16	1252809lyeaAlmethionine sulfoxide reductase Bl+
STM1292_161_195	0.01	-3.25	1252810lyeaClputative cytoplasmic proteinl+
STM1293_513_547	0.17	1.32	1252811lpncAlnicotinamidase/pyrazinamidasel-
STM1294_34_68	0.10	-1.28	1252812lansAlcytoplasmic asparaginase II-
STM1295_1634_1668	0.13	-1.28	1252813lsppAlprotease 4l-
STM1296_365_399	0.42	1.17	1252814lydjAlputative oxidoreductasel+
STM1297_661_695	0.07	1.45	1252815lselDlserinephosphate synthetasel+
STM1298_1783_1817	0.29	1.20	1252816ltopBIDNA topoisomerase III+
STM1299_665_699	0.02	-2.22	1252817lgdhAlglutamate dehydrogenasel-
STM1300_145_179	0.03	2.13	1252818lSTM1300lputative periplasmic proteinl+
STM1301_273_307	0.15	-1.35	1252819lSTM1301lpyrimidine (deoxy)nucleoside triphosphate pyrophosphohydrolasel-
STM1302_641_675	0.22	1.23	1252820lxthAlexonuclease III-
STM1303_484_518	0.20	-1.14	1252821largDlbi-functional succinylornithine transaminase/acetylornithine transaminasel+
STM1304_932_966	0.00	-1.47	1252822lastAlarginine succinyltransferasel+

STM1305_1184_1218	0.03	-1.29	1252823lastDlsuccinylglutamic semialdehyde dehydrogenasel+
STM1308_241_275	0.15	1.27	1252826lspylperiplasmic proteinl+
STM1309_869_903	0.01	1.81	1252827lSTM1309lendonuclease of nucleotide excision repairl-
STM1310_537_571	0.06	1.55	1252828lnadEINAD synthetasel-
STM1311_177_211	0.02	2.03	1252829losmEIDNA-binding transcriptional activatorl+
STM1312_241_275	0.06	1.49	1252830lcelAIN N'-diacetylchitobiose-specific PTS system transporter subunit IIIBl+
STM1314_137_171	0.00	-1.46	1252832lcelCIN N'-diacetylchitobiose-specific PTS system transporter subunit IIIAl+
STM1315_105_139	0.00	-1.49	1252833lcelDIDNA-binding transcriptional dual regulatorl+
STM1316_637_671	0.75	-1.12	1252834lcelFphospho-beta-glucosidase/cellobiose-6-phosphate hydrolasel+
STM1317_321_355	0.30	-1.09	1252835lcelGhypothetical proteinl+
STM1318_1662_1696	0.05	1.93	1252836lkatElhydroperoxidase III-
STM1319_20_56	0.02	1.25	1252837lcedAlcell division modulatorl+
STM1320_537_571	0.13	-1.53	1252838lydjNlkinase/transporter-like proteinl-
STM1321_105_139	0.02	1.53	1252839lydjMlhypothetical proteinl-
STM1322_145_179	0.15	1.10	1252840lyniClpredicted hydrolasel-
STM1323_407_441	0.01	-1.83	1252841lyniBlputative regulatory proteinl+
STM1324_769_803	0.01	-1.83	1252842lSTM1324lputative cytoplasmic proteinl-
STM1325_225_259	0.30	1.14	1252843lydiZlputative cytoplasmic proteinl-
STM1326_433_467	0.13	1.30	1252844lpfkB16-phosphofructokinase 2l-
STM1327_721_755	0.75	1.15	1252845lydiYlputative outer membrane proteinl+
STM1328_905_939	0.00	2.95	1252846lSTM1328lputative outer membrane proteinl-
STM1332_931_965	0.03	-1.50	1252850lrfclO-antigen polymerasel-
STM1333_1522_1556	0.29	-1.21	1252851lthrSlthreonyl-tRNA synthetasel+
STM1334.c_417_451	0.74	-1.08	1252852linfCltranslation initiation factor IF-3l+
STM1335_109_144	0.02	-2.23	1252853lrpmlI50S ribosomal protein L35l+
STM1336_129_163	0.01	-2.18	1252854lrplTl50S ribosomal protein L20l+
STM1337_585_619	0.05	1.69	1252855lpheSlphenylalanyl-tRNA synthetase subunit alphal+
STM1338_1933_1967	0.00	-1.48	1252856lpheTlphenylalanyl-tRNA synthetase subunit betal+
STM1339_205_239	0.01	1.70	1252857lihfAlintegration host factor subunit alphal+
STM1340_577_611	0.60	-1.13	1252858lbtuClvitamin B12-transporter permeasel+
STM1341_397_431	0.00	-1.67	1252859lbtuElpredicted glutathione peroxidasel+
STM1342_609_643	0.03	1.28	1252860lbtuDlvitamin B12-transporter ATPasel+
STM1343_97_131	0.17	-1.19	1252861lnlpCllipoproteinl+
STM1344_529_563	0.06	1.44	1252862lydiVlhypothetical proteinl+

STM1345_828_862	0.07	1.25	1252863lydiUlhypothetical proteinl+
STM1346_129_163	0.65	-1.15	1252864lydiElhypothetical proteinl-
STM1347_336_370	0.06	-1.41	1252865laroHlphospho-2-dehydro-3-deoxyheptonate aldolasel-
STM1348_513_547	0.24	-1.09	1252866lydiAlhypothetical proteinl-
STM1349_1444_1478	0.01	-1.51	1252867lppslphosphoenolpyruvate synthasel+
STM1350_1442_1476	0.06	1.20	1252868lydiDlshort chain acyl-CoA synthetasel-
STM1351_137_171	0.08	1.58	1252869lydiTlputative ferredoxinl-
STM1352_816_850	0.81	-1.02	1252870lydiSlflavoproteinl-
STM1355_257_291	0.20	1.50	1252873lydiPlputative transcriptional regulatorl+
STM1356_345_379	0.04	1.62	1252874lydiOlputative acyl-CoA dehydrogenasel-
STM1357.S_725_759	0.58	-1.13	1252875lydiFlputative acetyl-CoA/acetoacetyl-CoA transferase beta subunitl-
STM1358_449_483	0.46	1.13	1252876laroDI3-dehydroquinate dehydratasel-
STM1362_325_359	0.00	-3.10	1252880lydiLlputative cytoplasmic proteinl-
STM1363_49_83	0.07	2.01	1252881lrprAlmisc_RNAI-
STM1364_712_746	0.04	1.18	1252882lydiKlpredicted inner membrane proteinl-
STM1365_2362_2396	0.20	-1.29	1252883lydiJlputative oxidasel+
STM1366_185_219	0.16	1.21	1252884ISTM1366lhypothetical proteinl+
STM1367_11_49	0.21	-1.36	1252885lydiHlputative cytoplasmic proteinl+
STM1369_137_171	0.01	1.83	1252887lsufAliron-sulfur cluster assembly scaffold proteinl+
STM1370_1001_1035	0.01	2.17	1252888lsufBlcysteine desulfurase activator complex subunit SufBl+
STM1371_513_547	0.04	1.32	1252889lsufClysulfurase ATPase componentl+
STM1373_478_512	0.00	1.47	1252891lsufSlselenocysteine lyasel+
STM1375_195_229	0.32	-1.09	1252893lynhGlhypothetical proteinl+
STM1377_103_137	0.12	1.40	1252895llpplmurein lipoproteinl-
STM1378_622_656	0.09	-1.32	1252896lpykFlpyruvate kinasel-
STM1379_377_411	0.00	-3.03	1252897lorf48lputative amino acid permeasel-
STM1380_545_579	0.01	-2.60	1252898lorf32lputative proline iminopeptidasel-
STM1381_325_359	0.00	-2.85	1252899lorf245lputative cytoplasmic proteinl-
STM1382_676_710	0.53	-1.08	1252900lorf408lputative regulatory proteinl-
STM1383_2440_2474	0.05	2.68	1252901lttrAltetrathionate reductase complex subunit Al-
STM1384_432_466	0.92	1.01	1252902lttrCltetraphionate reductase complex subunit Cl-
STM1387_161_195	0.01	-1.61	1252905lttrRlresponse regulatorl+
STM1388_177_211	0.09	-1.47	1252906lorf70lhypothetical proteinl+
STM1389_449_483	0.05	-1.52	1252907lorf319lputative inner membrane proteinl-
STM1390_129_163	0.02	1.81	1252908lorf242lputative regulatory proteinl-
STM1391_129_163	0.04	1.58	1252909lssrBltranscriptional activatorl-

STM1394_559_593	0.29	1.13	1252912lssaClouter membrane secretin precursorl+
STM1395_757_791	0.30	1.22	1252913lssaDlvirulence proteinl+
STM1396_153_187	0.18	1.55	1252914lssaElsecretion system effectorl+
STM1397_89_123	0.03	2.46	1252915lsseAlsecretion system chaperone proteinl+
STM1398_409_443	0.90	1.62	1252916lsseBltranslocation machinery componentl+
STM1399_385_419	0.31	1.13	1252917lsscAlsecretion system chaparonel+
STM1400_1172_1206	0.04	1.58	1252918lsseCltranslocation machinery componentl+
STM1401_281_315	0.34	1.42	1252919lsseDltranslocation machinery componentl+
STM1402_9_43	0.34	1.46	1252920lsseElsecreted effector proteinl+
STM1403_274_308	0.05	1.39	1252921lsscBlsecretion system chaparonel+
STM1404_593_627	0.01	1.40	1252922lsseFlsecreted effector proteinl+
STM1405_577_611	0.15	1.38	1252923lsseGlsecreted effector proteinl+
STM1406_93_127	0.53	3.69	1252924lssaGlttype III secretion system apparatus proteinl+
STM1407_2_36	0.01	2.44	1252925lssaHlttype III secretion system apparatus proteinl+
STM1408_161_195	0.08	1.37	1252926lssallttype III secretion system apparatus proteinl+
STM1409_49_83	0.16	1.50	1252927lssaJneedle complex inner membrane lipoproteinl+
STM1410_109_143	0.01	1.85	1252928lSTM1410lputative cytoplasmic proteinl+
STM1411_513_547	0.05	1.39	1252929lssaKlttype III secretion system apparatus proteinl+
STM1412_658_692	0.05	2.02	1252930lssaLlttype III secretion system apparatus proteinl+
STM1414_1087_1121	0.98	2.00	1252932lssaVlsecretion system apparatus protein SsaVI+
STM1416_257_291	0.05	1.55	1252934lssaOltype III secretion system apparatus proteinl+
STM1417_166_200	0.10	1.41	1252935lssaPltype III secretion system apparatus proteinl+
STM1418_529_563	0.18	1.62	1252936lssaQlttype III secretion system proteinl+
STM1419_273_307	0.37	1.58	1252937lssaRlttype III secretion system proteinl+
STM1420_189_223	0.33	1.22	1252938lssaSltype III secretion system apparatus proteinl+
STM1421_305_339	0.01	1.38	1252939lssaTlttype III secretion system apparatus proteinl+
STM1423_39_73	0.86	1.24	1252941lvalWltRNAI-
STM1424_38_72	0.58	-1.42	1252942lvalVltRNAI-
STM1425_823_857	0.02	-2.46	1252943lydhElmultidrug efflux proteinl-
STM1426_529_563	0.68	1.08	1252944lribElriboflavin synthase subunit alphal+
STM1427_1030_1064	0.04	-1.68	1252945lcfcyclopropane fatty acyl phospholipid synthasel-
STM1428_335_369	0.15	2.15	1252946lydhCinner membrane transport protein YdhCl-
STM1429_769_803	0.01	1.21	1252947lydhBlputative DNA-binding transcriptional regulatorl+
STM1430_699_733	0.06	-1.21	1252948lpurRlDNA-binding transcriptional repressor PurRl-
STM1431_61_95	0.25	1.31	1252949lsodBlsuperoxide dismutasel-
STM1432_713_747	0.20	-1.19	1252950lydhOlputative cell wall-associated hydrolasel-

STM1433_165_199	0.55	1.16	1252951lydhDhypothetical proteinl+
STM1434_225_259	0.44	-1.10	1252952lrntribonuclease TI-
STM1435_321_355	0.06	1.47	1252953lgloAlglyoxalase II-
STM1436_995_1029	0.24	-1.17	1252954lnemAIN-ethylmaleimide reductase FMN-linked-
STM1437_561_595	0.13	-1.12	1252955lydhMlputative transcriptional repressorl-
STM1438_29_63	0.05	1.79	1252956lydhLlputative oxidoreductasel+
STM1439_593_627	0.01	-2.18	1252957lydhFlputative aldo/keto reductasel+
STM1440_105_139	0.00	-2.06	1252958lsodClsuperoxide dismutasel+
STM1441_1421_1455	0.79	-1.22	1252959lSTM1441lputative inner membrane proteinl-
STM1442_97_131	0.03	-1.61	1252960lydhJlputative multidrug resistance efflux pumpl-
STM1443_121_155	0.49	-1.12	1252961lydhHlputative inner membrane proteinl-
STM1444_129_163	0.03	1.49	1252962lslyAltranscriptional regulator SlyAl+
STM1445_389_423	0.05	1.47	1252963lslyBlputative outer membrane lipoproteinl-
STM1446_1083_1117	0.31	-1.16	1252964lanmKlanhydro-N-acetyl muramic acid kinasel+
STM1447_113_147	0.53	1.08	1252965lydhAlhypothetical proteinl+
STM1448_177_211	0.05	-1.35	1252966lpdxHlpyridoxamine 5'-phosphate oxidasel+
STM1449_1204_1238	0.02	-1.21	1252967ltyrSltyrosyl-tRNA synthetasel+
STM1450_129_163	0.13	-1.37	1252968lpdxYlpyridoxamine kinasel+
STM1451_465_499	0.02	-2.57	1252969lgstIglutathionine S-transferasel-
STM1452_667_701	0.02	-1.75	1252970ltppBlputative tripeptide transporter permeasel-
STM1453_537_571	0.05	1.51	1252971lnthlendonuclease III-
STM1454_257_291	0.02	1.47	1252972lydgQlSoxR-reducing system protein RsxEl-
STM1455_49_83	0.01	-2.47	1252973lydgPlelectron transport complex protein RnfGl-
STM1456_524_558	0.00	-2.31	1252974lrnfDlelectron transport complex protein RnfDl-
STM1457_1225_1259	0.13	-1.34	1252975lSTM1457lelectron transport complex protein RnfCl-
STM1458_417_451	0.01	-1.87	1252976lydgMlelectron transport complex protein RnfBl-
STM1459_321_355	0.04	-1.41	1252977lSTM1459lNa(+) -translocating NADH-quinone reductase subunit El-
STM1460_81_115	0.07	-1.33	1252978lydgKlputative inner membrane proteinl-
STM1461.S_161_195	0.01	1.39	1252979lydgTloriC-binding nucleoid-associated proteinl-
STM1462.S_714_748	0.05	1.41	1252980lydgJlputative oxidoreductasel+
STM1463_267_301	0.47	1.18	1252981laddadenosine deaminasel-
STM1464_37_71	0.00	-1.21	1252982lmalYlpseudol-
STM1465_145_179	0.01	-1.28	1252983lmalXlpseudol-
STM1466_1230_1264	0.02	1.21	1252984lydgAlputative periplasmic proteinl-
STM1467_1073_1107	0.16	-1.19	1252985lmanAlmannose-6-phosphate isomerasel-
STM1468_1080_1114	0.00	-8.24	1252986lfumAlfumarase Al+

STM1469_469_503	0.00	-3.45	1252987lfumClfumarate hydrataseI+
STM1471_1007_1041	0.01	-1.92	1252989lrstBlsensor protein RstBII-
STM1473_647_681	0.05	1.28	1252991lompNlouter membrane protein N precursorI-
STM1474_188_222	0.27	1.14	1252992lSTM1474lpseudol+
STM1475_131_167	0.56	1.07	1252993lrstAIDNA-binding response regulator in two-component regulatory system with RstBII-
STM1476_171_205	0.05	-1.72	1252994lydgClputative inner membrane proteinI+
STM1477_1280_1314	0.06	1.37	1252995lydgllputative amino acid transporterI-
STM1478_865_899	0.22	-1.29	1252996lydgHlputative periplasmic proteinI-
STM1479_739_773	0.52	1.11	1252997lpntAINAD(P) transhydrogenase subunit alphal+
STM1480_1126_1160	0.09	-1.26	1252998lpntBlypyridine nucleotide transhydrogenaseI+
STM1481_292_326	0.40	1.09	1252999ltqsAlputative transport proteinI-
STM1483_285_319	0.25	1.13	1253001lydgElmultidrug efflux system protein MdtII+
STM1484_432_466	0.01	1.45	1253002lSTM1484lpputative proteasel-
STM1486_1155_1189	0.03	1.92	1253004lynfMlputative transport proteinI-
STM1487_417_451	0.02	-1.23	1253005lynfLlputative transcriptional regulatorI-
STM1488_830_864	0.30	1.10	1253006lmclpts operon transcriptional repressorI+
STM1489_65_99	0.02	-1.96	1253007lbioDlputative dithiobiotin synthetaseI+
STM1490_575_609	0.95	-1.02	1253008lSTM1490lpputative voltage-gated CIC-type chloride channel ClcBII-
STM1491_966_1000	0.09	-1.19	1253009lSTM1491lproline/glycine betaine transport systemsI-
STM1492_289_323	0.31	1.07	1253010lSTM1492lpputative ABC transporter permease componentI-
STM1494_97_131	0.40	1.11	1253012lSTM1494lpputative transport system permease componentI-
STM1495_65_99	0.37	1.05	1253013lynfltwlarginine leader-binding protein DmsDI-
STM1496_577_611	0.18	1.15	1253014lSTM1496lpputative dimethylsulfoxide reductaseI-
STM1497_92_126	0.47	1.56	1253015lSTM1497lpputative dimethyl sulphoxide reductaseI-
STM1498_1597_1631	0.03	2.10	1253016lSTM1498lpputative dimethyl sulphoxide reductaseI-
STM1499_2211_2245	0.27	1.52	1253017lSTM1499lpputative dimethyl sulphoxide reductase chain A1I-
STM1500_100_134	0.03	1.46	1253018lynfDlputative outer membrane proteinI-
STM1501_33_67	0.06	1.22	1253019lynfClhypothetical proteinI+
STM1502_409_443	0.80	1.04	1253020lspespeGlspermidine N1-acetyltransferaseI-
STM1503_97_131	0.02	1.35	1253021lynfBlputative periplasmic proteinI-
STM1504_273_308	0.07	-1.12	1253022lynfAlhypothetical proteinI+
STM1505_1144_1178	0.05	2.67	1253023lrspAlputative dehydrataseI+
STM1506_789_823	0.23	-1.13	1253024lrspBlputative dehydrogenaseI+
STM1509_145_179	0.06	-1.62	1253027lydfZlputative cytoplasmic proteinI-
STM1510_65_99	0.29	1.19	1253028lydfHlputative regulatory proteinI-

STM1511_65_99	0.33	-1.11	1253029lydfGIL-allo-threonine dehydrogenase NAD(P)-bindingl-
STM1512_1828_1862	0.04	-1.24	1253030ldcpdipeptidyl carboxypeptidase III+
STM1513_145_179	0.09	1.24	1253031lSTM1513lputative cytoplasmic proteinl+
STM1514_4_41	0.05	2.69	1253032lydeJlcompetence damage-inducible protein Al-
STM1515_193_227	0.01	1.30	1253033lydellhypothetical proteinl+
STM1516_797_831	0.43	1.19	1253034lydeElputative MFS-type transporter YdeEl-
STM1517_401_435	0.69	1.12	1253035lydeDlO-acetylserine/cysteine export proteinl+
STM1519.S_225_259	0.01	-2.10	1253037lmarAIDNA-binding transcriptional activator MarAl-
STM1520_257_291	0.01	1.92	1253038lmarRIDNA-binding transcriptional repressor MarRl-
STM1521_337_371	0.01	1.63	1253039lmarClmultiple drug resistance protein MarCl+
STM1522_1056_1090	0.04	1.49	1253040lydeAlsugar efflux transporterl-
STM1523_817_851	0.15	1.27	1253041lyneJlputative transcriptional regulatorl-
STM1524_726_760	0.03	1.46	1253042lynellputative succinate-semialdehyde dehydrogenasel+
STM1525_81_115	0.29	1.11	1253043lyneHlglutaminasel+
STM1527_601_635	0.01	1.56	1253045lSTM1527lputative inner membrane proteinl+
STM1528_401_435	0.02	2.44	1253046lSTM1528lputative outer membrane proteinl-
STM1531_289_323	0.07	1.69	1253049lSTM1531lputative hydrogenasel-
STM1532_545_579	0.08	1.14	1253050lSTM1532lputative dehydrogenase proteinl-
STM1533_575_609	0.12	-1.27	1253051lSTM1533lputative hydrogenasel-
STM1534_369_403	0.62	-1.03	1253052lSTM1534lputative hydrogenasel-
STM1535_65_99	0.01	1.14	1253053lSTM1535lputative hydrogenase proteinl-
STM1536_321_355	0.00	-1.52	1253054lSTM1536lputative hydrogenase maturation proteasel-
STM1537_33_67	0.06	2.35	1253055lSTM1537lputative Ni/Fe hydrogenase 1 b-type cytochrome subunitl-
STM1539_515_549	0.00	2.14	1253057lSTM1539lputative hydrogenase-1 small subunitl-
STM1540_221_255	0.00	5.67	1253058lSTM1540lputative hydrolasel+
STM1541_385_419	0.02	1.48	1253059lSTM1541lputative regulatory proteinl+
STM1542_899_933	0.83	-1.03	1253060lSTM1542lputative zinc-binding dehydrogenasel-
STM1543_1192_1226	0.17	1.28	1253061lSTM1543lputative transport proteinl-
STM1544_1486_1520	0.01	3.53	1253062lpqaAlPhoPQ-regulated proteinl-
STM1545_979_1013	0.23	-1.12	1253063lSTM1545lputative multidrug efflux proteinl-
STM1548.s_809_843	0.01	3.06	1253066lSTM1548.slputative S-adenosylmethionine/tRNA-ribosyltransferase-isomerasel+
STM1549_52_86	0.03	-1.32	1253067lSTM1549lputative translation initiation inhibitorl-
STM1550_105_139	0.06	1.25	1253068lSTM1550lputative cytoplasmic proteinl-
STM1551_177_211	0.05	1.50	1253069lSTM1551lputative cytoplasmic proteinl-
STM1551.1n_273_307	0.72	-1.03	2673754lSTM1551.1nlhypothetical proteinl+

STM1552_729_763	0.52	1.07	1253070lSTM1552lputative cytoplasmic proteinl+
STM1553_561_595	0.04	1.34	1253071lSTM1553lpseudol-
STM1554_788_822	0.62	1.11	1253072lSTM1554lputative coiled-coil proteinl-
STM1557_620_654	0.33	-1.30	1253075lSTM1557lputative aminotransferasel+
STM1558_1845_1879	0.02	-1.44	1253076lSTM1558lputative glycosyl hydrolasel-
STM1559_1690_1724	0.02	-1.56	1253077lSTM1559lputative glycosyl hydrolasel-
STM1560_850_884	0.10	1.11	1253078lSTM1560lputative alpha amylasel-
STM1561_249_283	0.05	1.77	1253079lSTM1561lputative lipoproteinl-
STM1562_45_79	0.03	3.31	1253080lhdeBlacid-resistance proteinl-
STM1563_225_259	0.03	1.67	1253081lsmClputative envelope proteinl-
STM1564_121_155	0.01	1.74	1253082lyddXlbiofilm-dependent modulation proteinl+
STM1565_5_39	0.73	1.05	1253083lrpsVI30S ribosomal subunit S22l+
STM1566_1499_1533	0.08	-1.51	1253084lsfcAINAD-linked malate dehydrogenasel+
STM1567_332_366	0.10	1.43	1253085ladhPlalcohol dehydrogenasel+
STM1568_113_147	0.07	1.63	1253086lfdnllformate dehydrogenase-N subunit gammal-
STM1569_705_739	0.31	1.11	1253087lfdnHlformate dehydrogenase-N beta subunitl-
STM1571_225_259	0.08	1.41	1253089lyddGlhypothetical proteinl+
STM1572_730_764	0.01	-2.26	1253090lnmpClputative outer membrane porin precursorl+
STM1573.Sc_289_323	0.02	-1.54	1253091lSTM1573.Scputative cytoplasmic proteinl+
STM1574_649_683	0.04	1.28	1253092lsmvAlmethyl viologen resistancecl-
STM1575_377_411	0.02	1.79	1253093lSTM1575lputative transcriptional regulatorl+
STM1576_982_1016	0.07	-1.42	1253094lnarUlnitrate extrusion proteinl+
STM1577_3606_3640	0.11	1.50	1253095lnarZlnitrate reductase 2 alpha subunitl+
STM1578_1282_1316	0.01	-2.67	1253096lnarYlnitrate reductase 2 beta subunitl+
STM1579_65_99	0.01	-2.03	1253097lnarWlnitrate reductase 2 delta subunitl+
STM1580_129_163	0.00	-3.40	1253098lnarVlnitrate reductase 2 gamma subunitl+
STM1581_321_355	0.61	1.06	1253099lyddElhypothetical proteinl+
STM1582_681_715	0.54	1.07	1253100lnhoAlputative arylamine N-acetyltransferasel-
STM1583_129_163	0.00	2.60	1253101lSTM1583lputative cytoplasmic proteinl-
STM1584_1311_1345	0.08	1.17	1253102lansPIL-asparagine transport proteinl+
STM1585_65_99	0.02	1.99	1253103lSTM1585lputative outer membrane lipoproteinl-
STM1586_575_609	0.05	-1.52	1253104lSTM1586lputative periplasmic proteinl-
STM1587_1506_1540	0.01	1.28	1253105lynclputative outer membrane receptorl+
STM1588_449_483	0.60	-1.09	1253106lyncclputative DNA-binding transcriptional regulatorl-
STM1589_296_330	0.02	-1.14	1253107lynclputative NADP-dependent oxidoreductasel-
STM1590_385_419	0.80	1.04	1253108lyncclputative acyltransferasel+

STM1591_86_121	0.04	-1.14	1253109lydcZlputative inner membrane proteinl+
STM1592_149_183	0.07	1.33	1253110lydcYlputative cytoplasmic proteinl-
STM1593_321_355	0.03	-1.18	1253111lsrfAlputative virulence proteinl+
STM1594_2047_2081	0.11	-1.23	1253112lsrfBlputative virulence proteinl+
STM1595_1418_1452	0.22	-1.14	1253113lsrfClputative virulence proteinl+
STM1596_67_102	0.25	-1.11	1253114lydcXlputative inner membrane proteinl-
STM1597_874_908	0.00	2.11	1253115lydcWlputative aldehyde dehydrogenasel-
STM1598_530_564	0.02	1.33	1253116lydcRlputative regulatory proteinl-
STM1599_289_323	0.03	2.49	1253117lpdgLlperiplasmic dipeptidase precursorl-
STM1601_70_107	0.05	1.68	1253119lugtLlhypothetical proteinl-
STM1602_461_495	0.05	1.65	1253120lsifBlsecreted effector proteinl+
STM1603_115_149	0.02	-1.85	1253121yncJlputative periplasmic proteinl+
STM1604_1798_1832	0.07	1.63	1253122lydcPlputative collagenasel-
STM1605_242_276	0.01	1.68	1253123lydcNlputative repressorl-
STM1606_452_486	0.11	-1.27	1253124ISTM1606lputative benzoate membrane transport proteinl+
STM1607_617_651	0.30	-1.11	1253125ISTM1607lputative outer membrane lipoproteinl-
STM1608_129_163	0.19	-1.24	1253126ltehBltellurite resistance protein TehBl-
STM1609_55_89	0.15	-1.13	1253127ltehAlpotassium-tellurite ethidium and proflavin transporterl-
STM1611_337_371	0.04	1.64	1253129lrimLlribosomal-protein-L7/L12-serine acetyltransferasel-
STM1613_17_51	0.02	-2.43	1253131ISTM1613lputative PTS system enzymellB componentl+
STM1614_667_701	0.01	-1.97	1253132ISTM1614lputative PTS system enzyme IIC componentl+
STM1615_385_419	0.05	-1.41	1253133ISTM1615lputative nucleoside triphosphatasesel+
STM1617_577_611	0.01	-1.83	1253135ISTM1617lribulose-phosphate 3-epimerasel+
STM1618_129_163	0.01	-1.47	1253136ISTM1618lputative transcriptional repressor of sgc operonl+
STM1619_401_435	0.44	-1.13	1253137ISTM1619lcryptic aminoglycoside resistance genel+
STM1620_1036_1070	0.60	-1.04	1253138ISTM1620lputative oxidasel-
STM1621_137_171	0.52	-1.08	1253139ISTM1621lputative periplasmic proteinl-
STM1622_1617_1651	0.02	-1.63	1253140lmdoDlglucan biosynthesis protein Dl-
STM1623_1294_1328	0.04	-2.02	1253141ISTM1623lputative carboxylesterasel-
STM1624_665_699	0.00	-5.65	1253142ISTM1624lputative cytoplasmic proteinl-
STM1625_833_867	0.00	-11.25	1253143lydcClputative transcriptional regulatorl+
STM1626_1427_1461	0.00	-2.50	1253144ltrgImethyl-accepting chemotaxis protein III-
STM1627_248_282	0.03	1.34	1253145ISTM1627lalcohol dehydrogenase class III-
STM1628_85_119	0.39	1.13	1253146ISTM1628lputative cytoplasmic proteinl-
STM1630_145_179	0.01	3.85	1253148ISTM1630lputative inner membrane proteinl-
STM1631_1124_1158	0.01	3.76	1253149lsseJlsecreted effector proteinl+

STM1632_209_243	0.01	1.94	1253150 STM1632 putative inner membrane proteinl-
STM1633_417_451	0.01	1.82	1253151 STM1633 putative periplasmic binding proteinl+
STM1634_273_307	0.51	1.08	1253152 STM1634 putative ABC transporter permease componentl+
STM1635_513_547	0.66	1.04	1253153 STM1635 putative ABC-type polar amino acid transport system ATPase componentl+
STM1636_281_315	0.09	-1.32	1253154 STM1636 putative ABC-type transport system membrane componentl+
STM1637_1192_1226	0.20	-1.30	1253155 STM1637 putative inner membrane proteinl+
STM1638_321_355	0.18	-1.28	1253156 STM1638 putative SAM-dependent methyltransferasel+
STM1639_301_335	0.01	-2.18	1253157 cybB cytochrome b561l-
STM1640_545_579	0.99	-1.00	1253158 ydcF putative inner membrane proteinl-
STM1641_3295_3329	0.05	1.14	1253159 hrpA ATP-dependent RNA helicase HrpAl-
STM1642_31_65	0.02	1.23	1253160 lacpD azoreductasel+
STM1643_33_67	0.07	1.35	1253161 STM1643 putative inner membrane proteinl-
STM1644_185_219	0.04	1.23	1253162 ydbL putative periplasmic proteinl-
STM1645_81_115	0.00	1.43	1253163 lynB putative outer membrane lipoproteinl-
STM1646_1958_1992	0.05	1.72	1253164 ydbH hypothetical proteinl-
STM1647_497_531	0.04	1.47	1253165 ldhA D-lactate dehydrogenasel+
STM1648_9_43	0.54	1.07	1253166 hslJ heat-inducible proteinl+
STM1649_65_99	0.06	-1.38	1253167 STM1649 putative cytoplasmic proteinl-
STM1651_2910_2944	0.04	1.54	1253169 lnifJ putative pyruvate-flavodoxin oxidoreductasel+
STM1652_337_371	0.00	-3.45	1253170 ynaF putative universal stress proteinl+
STM1653_273_307	0.05	1.22	1253171 STM1653 putative membrane transporter of cationsl-
STM1654_897_931	0.02	-1.44	1253172 ydaO C32 tRNA thiolasel+
STM1656_289_323	0.05	-1.14	1253174 zntB zinc transporterl-
STM1657_1068_1102	0.16	-1.20	1253175 STM1657 putative methyl-accepting chemotaxis proteinl-
STM1658_513_547	0.03	1.69	1253176 ydaL hypothetical proteinl-
STM1659_129_163	0.03	1.65	1253177 logtI O-6-alkylguanine-DNA:cysteine-protein methyltransferasel+
STM1660.S_577_611	0.11	-1.20	1253178 fnrlfumarate/nitrate reduction transcriptional regulatorl+
STM1661_897_931	0.01	1.64	1253179 ydaA universal stress protein UspEl+
STM1662_137_171	0.39	-1.11	1253180 ynaJ putative inner membrane proteinl-
STM1663_49_83	0.83	-1.05	1253181 ynall putative integral membrane proteinl+
STM1664_513_547	0.36	-1.08	1253182 STM1664 putative transcriptional regulatorl-
STM1665_513_547	0.03	2.09	1253183 STM1665 putative cytoplasmic proteinl+
STM1666_161_195	0.01	-1.37	1253184 STM1666 pseudol+
STM1667_105_139	0.04	1.89	1253185 STM1667 putative thiol peroxidasel-

STM1668_145_179	0.82	-1.03	1253186 STM1668 hypothetical protein -
STM1670_273_307	0.09	1.53	1253188 STM1670 putative lipoprotein -
STM1671_291_325	0.02	2.38	1253189 STM1671 putative regulatory proteinl+
STM1672_564_598	0.03	1.70	2673745 STM1672 I-I+
STM1673_65_99	0.16	-1.14	1253191 STM1673 putative outer membrane lipoprotein -
STM1675_213_247	0.12	1.27	1253193 STM1675 oxidoreductasel+
STM1676_417_451	0.03	1.37	1253194 STM1676 putative aldo/keto reductasel-
STM1677_481_515	0.11	1.43	1253195 STM1677 putative transcriptional regulatorl-
STM1678_369_403	0.07	2.18	1253196 STM1678 putative 2'-hydroxyisoflavone reductasel+
STM1679_671_705	0.15	1.23	1253197 mpAl periplasmic murein tripeptide transport proteinl-
STM1680_193_227	0.78	-1.05	1253198 lycjII murein peptide amidase Al+
STM1681_65_99	0.04	-1.24	1253199 lycjI putative chloromuconate cycloisomerasel-
STM1682_21_55	0.62	1.04	1253200 tpxI thiol peroxidasel+
STM1683_1119_1153	0.11	1.30	1253201 tyrRID DNA-binding transcriptional dual regulator tyrosine-bindingl-
STM1685_469_503	0.02	-2.04	1253203 lycjX putative ATPasel-
STM1686_33_67	0.00	-3.00	1253204 pspEl thiosulfate:cyanide sulfurtransferase (rhodanese)l-
STM1687_37_71	0.57	1.06	1253205 pspDl peripheral inner membrane phage-shock proteinl-
STM1688_81_115	0.45	-1.16	1253206 pspC DNA-binding transcriptional activatorl-
STM1689_125_159	0.06	1.38	1253207 pspB phage shock protein Bl-
STM1690_15_49	0.13	1.34	1253208 pspA phage shock proteinl-
STM1691_897_931	0.08	1.34	1253209 pspF phage shock protein operon transcriptional activatorl+
STM1692_907_941	0.03	1.33	1253210 sapA peptide transport proteinl+
STM1693_801_835	0.02	-1.73	1253211 sapB peptide transport proteinl+
STM1694_769_803	0.20	-1.11	1253212 sapC peptide transport proteinl+
STM1695_385_419	0.64	-1.08	1253213 sapD peptide transport proteinl+
STM1696_417_451	0.03	-1.40	1253214 sapF peptide transport proteinl+
STM1697_513_547	0.04	-1.41	1253215 STM1697 hypothetical proteinl-
STM1699_89_123	0.01	2.27	1253218 lycjE putative cytoplasmic proteinl+
STM1700_585_619	0.12	1.52	1253219 fabllenoyle-(acyl carrier protein) reductasel+
STM1701_465_499	0.23	-2.33	1253220 lyciW putative cytoplasmic proteinl+
STM1702_1016_1050	0.10	-1.49	1253221 rnble x ribonuclease III+
STM1704_33_67	0.16	-1.22	1253223 lyciT putative regulatory proteinl+
STM1705_133_167	0.11	1.83	1253224 osmB lipoproteinl+
STM1706_121_155	0.03	1.97	1253225 lyciH translation initiation factor Sui1l-
STM1707_641_675	0.91	-1.02	1253226 pyrFIOMP decarboxylase; OMPDCase; OMPdecasel-
STM1708_1131_1165	0.03	1.99	1253227 lyciM hypothetical proteinl-

STM1709_61_95	0.01	-1.12	1253228lyciSlputative inner membrane proteinl-
STM1710_41_75	0.18	1.24	1253229lpgpBlphosphatidylglycerophosphatase Bl-
STM1711_481_515	0.43	-1.14	1253230lribAIGTP cyclohydrolase III+
STM1712_1885_1919	0.02	-2.00	1253231lacnAlaconitate hydratasel-
STM1713_641_675	0.77	1.09	1253232lcysBltranscriptional regulator CysBl-
STM1714_1599_1633	0.12	-1.41	1253233ltopAIDNA topoisomerase II-
STM1715_5_39	0.99	1.00	1253234lyciNlhypothetical proteinl+
STM1716_880_914	0.08	1.12	1253235lsohBlpredicted inner membrane peptidasel-
STM1717_545_579	0.24	-1.26	1253236lyciKlshort chain dehydrogenasel+
STM1718_489_523	0.00	-3.21	1253237lbtuRlcob(I)yrinic acid a c-diamide adenosyltransferasel+
STM1719_385_419	0.10	-1.32	1253238lyciLI23S rRNA pseudouridylate synthase Bl-
STM1720_529_563	0.04	1.44	1253239lyciOlhypothetical proteinl-
STM1721_529_563	0.67	1.09	1253240ltrpHlhypothetical proteinl-
STM1722_9_43	0.21	-1.28	1253241ltrpLltrp operon leader peptidel+
STM1723_1468_1502	0.18	-1.24	1253242ltrpElanthranilate synthase component II+
STM1724_853_887	0.06	1.18	1253243ltrpDlbfunctional indole-3-glycerol-phosphate synthase/anthranilate phosphoribosyltransferasel+
STM1725_360_394	0.14	1.19	1253244ltrpClbifunctional indole-3-glycerol phosphate synthase/phosphoribosylantranilate isomerasel+
STM1726_387_421	0.74	-1.07	1253245ltrpBltryptophan synthase subunit betal+
STM1727_289_323	0.53	-1.12	1253246ltrpAltryptophan synthase subunit alphal+
STM1728_9_43	0.02	2.76	1253247lyciGlputative cytoplasmic proteinl+
STM1729_151_185	0.02	1.78	1253248lyciFlputative cytoplasmic proteinl+
STM1730_65_99	0.03	2.10	1253249lyciElputative cytoplasmic proteinl+
STM1731_385_419	0.36	1.13	1253250lSTM1731lputative catalasel+
STM1732_161_195	0.00	-9.02	1253251lompWlouter membrane protein WI-
STM1733_225_259	0.24	1.36	1253252lSTM1733lputative ferredoxinl+
STM1734_577_611	0.08	1.20	1253253lyciChypothetical proteinl+
STM1735_385_419	0.04	1.34	1253254lyciBlintracellular septation protein Al+
STM1736_101_135	0.71	1.09	1253255lyciAlpredicted hydrolasel+
STM1737_49_83	0.07	-1.51	1253256ltonBlmembrane spanning protein in TonB-ExbB-ExbD complex; transduces proton motive force of the cytoplasmic membrane to outer membrane transporters; involved in the transport of ron-siderophore complexes vitamin B12 and colicinsl-
STM1738_190_224	0.05	-1.29	1253257lycillYcil-like proteinl+
STM1739_590_624	0.11	-1.19	1253258lcislcardiolipin synthetasel+

STM1740_308_342	0.16	-1.27	2673771lyciUl-l+
STM1741_545_579	0.51	-1.03	1253260lSTM1741lputative voltage-gated potassium channel-
STM1742_710_744	0.01	-2.48	1253261lloppFloligopeptide transport proteinl-
STM1743_777_811	0.00	-3.08	1253262lloppDoligopeptide transporter ATP-binding componentl-
STM1744_625_659	0.01	-2.10	1253263lloppCloligopeptide transport proteinl-
STM1745_641_675	0.01	-2.61	1253264lloppBloligopeptide transporter permeasel-
STM1746.S_745_779	0.00	-3.83	1253265lloppAloligopeptide transport proteinl-
STM1748_259_293	0.08	2.53	1253267lychElhypothetical proteinl-
STM1749_1680_1714	0.00	-6.81	1253268ladhEliron-dependent alcohol dehydrogenasel+
STM1750_17_51	0.01	-1.37	1253269ltdklthymidine kinasel-
STM1751_17_51	0.14	-1.39	1253270lhnsIglobal DNA-binding transcriptional dual regulator H-NSl+
STM1752_641_675	0.79	-1.01	1253271lgalUlUTP--glucose-1-phosphate uridylyltransferase subunit GalUl-
STM1753_911_945	0.31	1.11	1253272lhnrIresponse regulator of RpoSl-
STM1754_641_675	0.11	1.21	1253273lychKlhypothetical proteinl-
STM1755_65_99	0.12	1.17	1253274lychJlhypothetical proteinl+
STM1756_385_419	0.77	-1.04	1253275lpurUlformyltetrahydrofolate deformylasel+
STM1758_49_83	0.67	-1.07	1253277lrtTlmisc_RNAI+
STM1760_563_597	0.13	-1.30	1253279lSTM1760ltetratricopeptide repeat proteinl-
STM1761_641_675	0.95	-1.01	1253280lnarInitrate reductase 1 gamma subunitl-
STM1762_337_371	0.85	-1.02	1253281lnarJlnitrate reductase 1 delta subunitl-
STM1763_1121_1155	0.02	-1.46	1253282lnarHlnitrate reductase 1 beta subunitl-
STM1764_3689_3723	0.08	1.85	1253283lnarGlnitrate reductase 1 alpha subunitl-
STM1766_830_864	0.03	-1.30	1253285lnarXlnitrate/nitrite sensor protein NarXI+
STM1767_241_275	0.04	-1.44	1253286lnarLIDNA-binding response regulator in two-component regulatory system with NarX (or NarQ)l+
STM1768_1018_1052	0.91	-1.01	1253287lychPlpredicted invasinl-
STM1769_275_309	0.54	1.07	1253288lychNlputative sulfur reduction proteinl+
STM1770_3_40	0.07	-1.25	1253289lchaBlcation transport regulatorl-
STM1771_1006_1040	0.10	1.55	1253290lchaAlcalcium/sodium:proton antiporterl+
STM1772_97_131	0.37	-1.18	1253291lkdsAl2-dehydro-3-deoxyphosphooctonate aldolasel-
STM1773_641_675	0.03	1.65	1253292lychAlputative transcriptional regulatorl-
STM1774_129_163	0.97	1.02	1253293lsirClputative transcriptional regulatorl-
STM1775_481_515	0.05	-1.39	1253294lhemKIN5-glutamine S-adenosyl-L-methionine-dependent methyltransferasel-
STM1776_980_1014	0.03	-1.43	1253295lprfAlpeptide chain release factor 1l-
STM1777_1058_1092	0.05	-1.33	1253296lhemAlglutamyl-tRNA reductasel-

STM1778_17_51	0.24	1.10	1253297lolBlouter membrane lipoprotein LolBl+
STM1779_265_299	0.10	-1.39	1253298lipkI4-diphosphocytidyl-2-C-methyl-D-erythritol kinasel+
STM1780_897_931	0.06	-1.69	1253299lprsAlribose-phosphate pyrophosphokinasel+
STM1781_1511_1545	0.05	-2.12	1253300lychMlputative sulfate transporter YchMl+
STM1782_201_235	0.00	-9.98	1253301lychHlpredicted inner membrane proteinl-
STM1783.S_385_419	0.04	2.09	1253302lpthlpeptidyl-tRNA hydrolasel+
STM1784_861_895	0.79	-1.03	1253303lychFltranslation-associated GTPasel+
STM1785_779_813	0.02	1.77	1253304lSTM1785lputative cytoplasmic proteinl-
STM1787_795_829	0.91	-1.04	1253306lSTM1787lhydrogenase 1 large subunitl+
STM1788_545_579	0.12	-1.23	1253307lSTM1788lhydrogenase 1 b-type cytochrome subunitl+
STM1789_377_411	0.04	-1.38	1253308lSTM1789lhydrogenase 1 maturation proteasel+
STM1791_65_99	0.27	1.41	1253310lSTM1791lputative hydrogenase-1 proteinl+
STM1792_594_628	0.02	1.24	1253311lSTM1792lputative cytochrome oxidase subunit II+
STM1793_522_556	0.79	-1.02	1253312lSTM1793lputative cytochrome oxidase subunit III+
STM1794_22_56	0.07	1.47	1253313lSTM1794lputative periplasmic proteinl+
STM1795_1111_1145	0.00	-8.53	1253314lSTM1795lputative glutamic dehydrogenase-like proteinl+
STM1796_1386_1420	0.54	1.09	1253315ltreAltrehalasel+
STM1797_145_179	0.20	1.35	1253316lymgElputative transglycosylase-associated proteinl-
STM1798_249_283	0.94	-1.02	1253317lycgRlputative inner membrane proteinl+
STM1799_209_243	0.12	1.14	1253318lemtAlmembrane-bound lytic murein transglycosylase El-
STM1800_289_323	0.14	1.12	1253319lldcAIl D-carboxypeptidase Al+
STM1801_1031_1065	0.02	-1.40	1253320lycgOlpotassium/proton antiporterl+
STM1803_940_974	0.00	-12.53	1253322ldadAId-amino acid dehydrogenase small subunitl-
STM1804.S_1232_1266	0.51	1.14	1253323lycgBlhypothetical proteinl+
STM1805_513_547	0.01	-1.46	1253324lfadRIfatty acid metabolism regulatorl-
STM1806_1442_1476	0.01	-1.26	1253325lnhaBlsodium/proton antiporterl+
STM1807_209_243	0.44	-1.10	1253326ldsBldisulfide bond formation protein Bl+
STM1808_137_171	0.03	2.11	1253327lSTM1808lputative cytoplasmic proteinl+
STM1809_119_154	0.01	1.93	1253328lSTM1809lputative cytoplasmic proteinl-
STM1810_6_41	0.02	2.51	1253329lSTM1810lputative cytoplasmic proteinl-
STM1811_129_163	0.01	1.67	1253330lycgNlhypothetical proteinl-
STM1812_257_291	0.12	1.37	1253331lycgMlpredicted isomerase/hydrolasel-
STM1813_45_81	0.02	1.88	1253332lycgLlputative cytoplasmic proteinl-
STM1814_177_211	0.03	-1.67	1253333lminCseptum formation inhibitorl+
STM1815_705_739	0.02	-2.17	1253334lminDlcell division inhibitor MinDl+
STM1816_161_195	0.78	1.01	1253335lminElcell division topological specificity factor MinEl+

STM1817_897_931	0.03	1.45	1253336lrndlribonuclease Dl-
STM1818_879_913	0.00	-6.82	1253337lfadDllong-chain-fatty-acid--CoA ligasel-
STM1819_65_99	0.03	-1.33	1253338lslplputative outer membrane proteinl-
STM1820_198_232	0.01	-2.14	1253339lyeaZlputative molecular chaperonel-
STM1821_1072_1106	0.07	-1.16	1253340lyoaAlputative DNA helicasel-
STM1822_17_51	0.09	-1.40	1253341lyoaBlputative translation initiation inhibitorl+
STM1823_65_99	0.07	1.38	1253342lyoaHlhypothetical proteinl-
STM1824_558_592	0.09	-1.32	1253343lpabBlpara-aminobenzoate synthase component II+
STM1825_49_83	0.21	-1.37	1253344lyeaBlhypothetical proteinl+
STM1826_910_944	0.05	1.26	1253345lsdaAll-serine deaminase I/L-threonine deaminase II+
STM1827.S_739_773	0.41	1.13	1253346lSTM1827.Slputative diguanylate cyclase/phosphodiesterasel+
STM1828_1358_1392	0.07	-1.41	1253347lyoaElputative inner membrane proteinl-
STM1829_157_191	0.10	2.44	1253348lSTM1829lputative cytoplasmic proteinl-
STM1830_257_291	0.01	-2.83	1253349lmanXlmannose-specific enzyme IIABI+
STM1831_321_355	0.01	-2.46	1253350lmanYlmannose-specific enzyme IICl+
STM1832_481_515	0.01	-2.73	1253351lmanZlmannose-specific PTS system protein IIDI+
STM1833_353_387	0.12	1.69	1253352lSTM1833lhypothetical proteinl+
STM1834_289_323	0.05	-1.36	1253353lyebNhypothetical proteinl+
STM1835_433_467	0.02	-1.80	1253354lrrmA123S rRNA methyltransferase Al-
STM1836_875_909	0.01	1.15	1253355lSTM1836lputative penicillin-binding protein 3l-
STM1837_145_179	0.12	-1.53	1253356lcspC1cold shock-like protein cspCl-
STM1838_25_59	0.01	-2.16	1253357yobFlputative cytoplasmic proteinl-
STM1839_123_160	0.01	3.78	1253358lSTM1839lhypothetical proteinl-
STM1840_57_91	0.01	1.70	1253359yobGlhypothetical proteinl-
STM1841_153_187	0.02	2.96	1253360lSTM1841lhypothetical proteinl+
STM1842_385_419	0.38	1.13	1253361lkdgRlputative transcriptional repressorl-
STM1843_967_1001	0.04	-1.30	1253362lSTM1843lputative transport proteinl+
STM1844_641_675	0.27	1.38	1253363lhtpXIheat shock protein HtpXI-
STM1845_1242_1276	0.03	-1.66	1253364lprclcarboxy-terminal proteasel-
STM1846_624_658	0.01	-2.17	1253365lproQlputative solute/DNA competence effectorl-
STM1847_173_207	0.04	-1.23	1253366lyebRlputative nucleotide-binding proteinl-
STM1848_493_527	0.29	-1.17	1253367yebSlputative inner membrane proteinl+
STM1849_2281_2315	0.77	1.23	1253368lSTM1849lputative inner membrane proteinl+
STM1850_1097_1131	0.47	-1.13	1253369lyebUlrRNA (cytosine-C(5)-)methyltransferase RsmFl+
STM1851_30_65	0.03	2.36	1253370lSTM1851lputative cytoplasmic proteinl+
STM1852_89_123	0.34	-1.19	1253371yebWlputative inner membrane lipoproteinl+

STM1853_417_451	0.13	2.01	1253372 pphAlserine/threonine protein phosphatase 1I-
STM1854_77_111	0.01	2.55	1253373 STM1854 putative inner membrane proteinI-
STM1856.1N_321_355	0.03	2.75	2673765 STM1856.1N hypothetical proteinI+
STM1857_129_163	0.00	-4.54	1253376 STM1857 putative acetyltransferasel-
STM1859_81_115	0.01	1.37	1253378 STM1859 putative cytoplasmic proteinI+
STM1861_73_107	0.02	2.76	1253380 STM1861 I-I+
STM1862_65_99	0.01	3.18	1253381 pagOl integral membrane proteinI+
STM1863_73_107	0.00	2.61	1253382 STM1863 putative inner membrane proteinI+
STM1864_225_259	0.00	2.93	1253383 STM1864 putative inner membrane proteinI+
STM1865_37_71	0.01	5.28	1253384 STM1865 I-I-
STM1866_119_153	0.02	3.63	1253385 STM1866 pseudol-
STM1867_44_82	0.03	4.40	1253386 pagKl PagKl+
STM1868_553_587	0.02	2.54	1253387 mig-3 phage-tail assembly-like proteinI-
STM1868.1N_38_72	0.05	2.55	2673772 STM1868.1N hypothetical proteinI-
STM1868A_75_109	0.79	-1.06	1253388 STM1868A lytic enzymeI+
STM1869_385_419	0.07	1.21	1253389 STM1869 phage-tail assembly-like proteinI-
STM1869A_17_51	0.25	1.15	1253390 STM1869A hypothetical proteinI-
STM1870_217_251	0.02	2.53	1253391 STM1870 RecE-like proteinI+
STM1871_593_627	0.03	1.30	1253392 STM1871 I-I+
STM1872_51_85	0.10	1.26	1253393 STM1872 putative cytoplasmic proteinI-
STM1873_241_275	0.02	1.35	1253394 STM1873 hypothetical proteinI-
STM1874_641_675	0.04	1.62	1253395 STM1874 putative inner membrane proteinI-
STM1875_289_323	0.02	1.81	1253396 yobAl hypothetical proteinI-
STM1876_179_213	0.54	-1.07	1253397 holEl DNA polymerase III subunit thetaI+
STM1877_617_651	0.35	-1.18	1253398 STM1877 putative amidohydrolasel+
STM1878_257_291	0.08	-1.24	1253399 lexoX exo-deoxyribonuclease XI+
STM1879_1341_1375	0.02	1.51	1253400 ptrBl protease 2I-
STM1880_121_155	0.01	2.22	1253401 yebEl putative inner membrane proteinI-
STM1881_49_83	0.01	1.63	1253402 yebFl putative periplasmic proteinI-
STM1882_90_124	0.01	2.43	1253403 yebG DNA damage-inducible protein YebG I-
STM1884_497_531	0.40	1.09	1253405 eddk keto-hydroxyglutarate-alcoholase/keto-deoxy-phosphogluconate aldolasel-
STM1885_1517_1551	0.76	1.04	1253406 edd phosphogluconate dehydrataseI-
STM1886_1213_1247	0.48	1.10	1253407 zwf glucose-6-phosphate 1-dehydrogenasel-
STM1887_513_547	0.04	1.46	1253408 yebK DNA-binding transcriptional regulator HexR I+
STM1888_1340_1374	0.09	-1.53	1253409 pykA pyruvate kinaseI+

STM1889_545_579	0.07	-1.25	1253410lmsbBllipid A biosynthesis (KDO)2-(lauroyl)-lipid IVA acyltransferasel-
STM1890_1025_1059	0.00	-2.87	1253411lyebAlhypothetical proteinl-
STM1891_81_115	0.02	-10.53	1253412lznuaLhigh-affinity zinc transporter periplasmic componentl-
STM1892.S_225_259	0.02	-2.25	1253413lznucLhigh-affinity zinc transporter ATPasel+
STM1893_513_547	0.04	-3.65	1253414lznubLhigh-affinity zinc transporter membrane componentl+
STM1895_523_557	0.07	1.37	1253416lrvuAIHolliday junction DNA helicase motor proteinl-
STM1896_410_444	0.03	2.62	1253417lSTM1896lputative cytoplasmic proteinl+
STM1897_397_431	0.37	1.14	1253418lyebBlhypothetical proteinl+
STM1898_105_139	0.04	-1.21	1253419lrvuClHolliday junction resolvasel-
STM1900_209_243	0.02	-1.56	1253421lntpAldATP pyrophosphohydrolasel-
STM1901_854_888	0.01	-2.41	1253422laspSlaspartytl-tRNA synthetasel-
STM1902_385_419	0.01	2.44	1253423lyecDlhypothetical proteinl+
STM1903_753_787	0.01	1.79	1253424lyecElhypothetical proteinl+
STM1904_209_243	0.09	-1.07	1253425lyecNlputative inner membrane proteinl+
STM1905_513_547	0.16	-1.35	1253426lyecOlputative SAM-dependent methyltransferasel+
STM1906_641_675	0.80	-1.04	1253427lyecPlputative enzymel+
STM1907_137_171	0.01	1.46	1253428lcuCopper homeostasis protein CutCl-
STM1908_97_131	0.02	-1.65	1253429lyecMlhypothetical proteinl-
STM1909_991_1025	0.57	-1.14	1253430largSlarginyl-tRNA synthetasel+
STM1910_1225_1259	0.05	1.98	1253431lSTM1910lputative penicillin-binding proteinl+
STM1911_845_879	0.69	1.03	1253432lSTM1911lputative cytoplasmic proteinl-
STM1912_357_391	0.90	1.01	1253433lflhElflagellar proteinl-
STM1913_1208_1242	0.71	-1.11	1253434lflhAlflagellar biosynthesis protein Al-
STM1914_793_827	0.08	2.17	1253435lflhBlflagellar biosynthesis protein FlhBl-
STM1915_353_387	0.08	-1.47	1253436lcheZlchemotaxis regulator CheZl-
STM1916_317_351	0.05	-1.35	1253437lcheYlchemotaxis regulator transmitting signal to flagellar motor componentl-
STM1917_539_573	0.02	-1.45	1253438lcheBlchemotaxis-specific methylesterasel-
STM1919_663_697	0.02	-1.77	1253440lcheMlmethyl accepting chemotaxis protein III-
STM1920_225_259	0.01	-2.39	1253441lcheWlpurine-binding chemotaxis proteinl-
STM1921_1401_1435	0.01	-2.16	1253442lcheAlchemotaxis protein CheAl-
STM1922_537_571	0.02	-1.86	1253443lmotBflagellar motor protein MotBl-
STM1923_21_55	0.15	-1.33	1253444lmotAlflagellar motor protein MotAl-
STM1924.S_41_75	0.00	-3.13	1253445lflhClttranscriptional activator FlhCl-
STM1925_209_243	0.00	-3.34	1253446lflhDlttranscriptional activator FlhDl-
STM1927_97_131	0.03	-1.80	1253448lyecGluniversal stress protein UspCl+

STM1928_903_937	0.45	-1.13	1253449 otsA trehalose-6-phosphate synthase -
STM1929_257_291	0.18	1.38	1253450 otsB trehalose-6-phosphate phosphatase -
STM1930_81_115	0.41	-1.26	1253451 STM1930 pseudo -
STM1932_457_491	0.00	2.09	1253453 ftnB ferritin-like protein +
STM1933_153_187	0.28	-1.17	1253454 STM1933 hypotheslal protein -
STM1934_225_259	0.06	1.26	1253455 STM1934 putative outer membrane lipoprotein +
STM1935_161_195	0.06	1.51	1253456 ftnL ferritin +
STM1936_102_137	0.09	-1.36	1253457 yecH putative cytoplasmic protein -
STM1937_1149_1183	0.55	-1.11	1253458 tyrP tyrosine-specific transport protein +
STM1938_97_131	0.00	-2.98	1253459 yecA hypotheslal protein -
STM1939_26_60	0.02	3.40	1253460 STM1939 putative glucose-6-phosphate dehydrogenase -
STM1940_1049_1083	0.02	1.48	1253461 STM1940 putative cell wall-associated hydrolase -
STM1941_141_175	0.00	2.33	1253462 STM1941 putative inner membrane protein -
STM1942_5_40	0.01	-2.11	1253463 leuZ tRNA -
STM1943_5_39	0.02	-2.12	1253464 cysT tRNA -
STM1945_417_451	0.70	-1.03	1253466 pgsA phosphatidylglycerophosphate synthetase -
STM1946_1090_1124	0.14	-1.14	1253467 luvrC lexinuclease ABC subunit C -
STM1947_337_371	0.13	1.07	1253468 luvrY response regulator -
STM1949_35_70	0.02	1.53	1253470 yecF hypotheslal protein +
STM1950_81_115	0.20	-1.24	1253471 sdIA DNA-binding transcriptional activator -
STM1951_529_563	0.48	-1.14	1253472 yecC putative amino-acid ABC transporter ATP-binding protein YecC -
STM1952_33_67	0.34	-1.12	1253473 yecS putative ABC-type amino acid transporter permease
STM1953_65_99	0.76	-1.05	1253474 yedO D-cysteine desulphydrase -
STM1954_357_391	0.09	2.04	1253475 fliY cystine transporter subunit -
STM1955_337_371	0.70	1.02	1253476 fliZ protein FliZ -
STM1956_161_195	0.07	-1.18	1253477 fliA flagellar biosynthesis sigma factor -
STM1957_251_285	0.03	-1.43	1253478 tnpA_2 transposase for IS200 -
STM1958_847_881	0.51	-1.10	1253479 fliB lysine-N-methylase -
STM1959_545_579	0.03	-2.40	1253480 fliC flagellin -
STM1960_949_983	0.01	-2.49	1253481 fliD flagellar capping protein +
STM1961_273_307	0.01	-1.67	1253482 fliS flagellar protein FliS +
STM1962_65_99	0.04	-1.54	1253483 fliT flagellar biosynthesis protein FliT +
STM1963_1154_1188	0.53	-1.02	1253484 amyA cytoplasmic alpha-amylase +
STM1964_241_275	0.27	1.25	1253485 yedD hypotheslal protein -
STM1965_555_589	0.01	-1.72	1253486 yedE predicted inner membrane protein +
STM1966_161_195	0.28	-1.13	1253487 yedF hypotheslal protein +

STM1968_279_313	0.01	-1.45	1253489 fliEl flagellar hook-basal body protein FliEl-
STM1969_748_782	0.11	1.16	1253490 fliFl flagellar MS-ring proteinl+
STM1970_97_131	0.86	-1.01	1253491 fliGl flagellar motor switch protein Gl+
STM1971_69_103	0.37	-1.10	1253492 fliHl flagellar assembly protein Hl+
STM1974_283_317	0.12	-1.21	1253495 fliKl flagellar hook-length control proteinl+
STM1975_177_211	0.02	1.64	1253496 fliLl flagellar basal body-associated protein FliLl+
STM1977_281_315	0.23	1.12	1253498 fliNl flagellar motor switch protein FliNl+
STM1978_209_243	0.03	1.32	1253499 fliOl flagellar biosynthesis protein FliOl+
STM1979_321_355	0.00	1.62	1253500 fliPl flagellar biosynthesis protein FliPl+
STM1980_137_171	0.02	3.35	1253501 fliQl flagellar biosynthesis protein FliQl+
STM1981_241_275	0.70	1.03	1253502 fliRl flagellar biosynthesis protein FliRl+
STM1982_313_347	0.01	2.26	1253503 rcsA colanic acid capsular biosynthesis activation protein Al+
STM1983_123_157	0.04	1.78	1253504 dsrB hypothetical proteinl-
STM1984_129_163	0.91	-1.07	1253505 yodDl putative cytoplasmic proteinl+
STM1986_209_243	0.02	1.53	1253507 yedPl mannosyl-3-phosphoglycerate phosphatasel+
STM1987_746_780	0.39	-1.10	1253508 STM1987l putative inner membrane proteinl-
STM1988.S_89_123	0.25	-1.29	1253509 STM1988.Sl putative cytoplasmic proteinl-
STM1989_641_675	0.04	-1.69	1253510 yedDl hypothetical proteinl-
STM1990_641_675	0.27	-1.11	1253511 yedAl hypothetical proteinl+
STM1991_113_147	0.06	1.19	1253512 vsrl DNA mismatch endonucleasel-
STM1992_1264_1298	0.03	-1.37	1253513 dcml DNA cytosine methylasel-
STM1993_481_515	0.02	-1.54	1253514 yedJl hypothetical proteinl-
STM1994_263_297	0.39	1.30	1253515 STM1994l putative inner membrane proteinl-
STM1995_558_592	0.28	1.20	1253516 ompSl putative porinl+
STM1996_178_212	0.07	1.67	1253517 lcspBl putative cold-shock proteinl-
STM1997_398_432	0.00	1.44	1253518 umuC DNA polymerase V subunit UmuCl-
STM1998_225_259	0.02	1.87	1253519 umuD DNA polymerase V subunit UmuDl-
STM1999_106_140	0.05	1.88	1253520 STM1999l putative cytoplasmic proteinl-
STM2000_31_65	0.05	1.39	1253521 serUltRNAI-
STM2001_402_437	0.00	-4.61	1253522 yeell putative inner membrane proteinl+
STM2003_57_91	0.27	1.28	1253524 STM2003l pseudol+
STM2006_685_719	0.37	1.06	2673718 STM2006l-I+
STM2007_1048_1082	0.43	-1.05	1253528 STM2007l tetrastricopeptide repeat proteinl+
STM2008_1324_1358	0.09	1.68	1253529 STM2008l putative periplasmic proteinl+
STM2011_17_51	0.01	-1.16	1253532 STM2011l putative cytoplasmic proteinl-
STM2011.1n_133_167	0.15	1.82	2673719 STM2011.1nl hypothetical proteinl+

STM2013_971_1005	0.13	-1.17	1253534lyeeOlpredicted multidrug efflux systeml-
STM2015_705_739	0.03	1.78	1253536lerfKlhypothetical proteinl-
STM2016_840_874	0.03	-1.37	1253537lcobTlnicotinate-nucleotide--dimethylbenzimidazole phosphoribosyltransferasel-
STM2018_449_483	0.05	-1.28	1253539lcobUladenosylcobinamide kinase/adenosylcobinamide-phosphate guanylyltransferasel-
STM2019_1418_1452	0.01	-2.01	1253540lcibiPlcobyric acid synthasel-
STM2020_17_51	0.05	-1.44	1253541lcibiOlvitamin B12 biosynthetic proteinl-
STM2021_329_363	0.01	-2.71	1253542lcibiQlvitamin B12 biosynthetic proteinl-
STM2022_61_95	0.01	-2.95	1253543lcibiNlcobalt transport protein CbiNi-
STM2024_289_323	0.00	-2.70	1253545lcibiLlcobalt-precorrin-2 C(20)-methyltransferasel-
STM2025_289_323	0.54	-1.27	1253546lcibiKlvitamin B12 biosynthetic proteinl-
STM2026_193_227	0.06	-1.74	1253547lcibiJlcobalt-precorrin-6x reductasel-
STM2027_685_719	0.00	-2.62	1253548lcibiHlprecorrin-3B C17-methyltransferasel-
STM2028_1021_1055	0.00	-3.78	1253549lcibiGlcobalamin biosynthesis protein CbiGi-
STM2029_97_131	0.00	-6.63	1253550lcibiFlvitamin B12 biosynthetic proteinl-
STM2030_437_471	0.00	-3.87	1253551lcibiTlcobalt-precorrin-6Y C(15)-methyltransferasel-
STM2032_813_847	0.00	-2.03	1253553lcibiDlcobalt-precorrin-6A synthasel-
STM2033_593_627	0.01	-3.18	1253554lcibiClprecorrin-8X methylmutasel-
STM2034_705_739	0.05	-1.40	1253555lcobiDlcobalamin biosynthesis proteinl-
STM2035_381_415	0.06	1.84	1253556lcibiAlcobyric acid a c-diamide synthasel-
STM2036_313_347	0.97	1.01	1253557lpocRltranscriptional regulatorl-
STM2037_397_431	0.06	-1.22	1253558lpduFlpropanediol diffusion facilitatorl-
STM2038_69_103	0.09	1.29	1253559lpduAlpolyhedral body proteinl+
STM2042_17_51	0.15	1.14	1253563lpduElpropanediol dehydratase small subunitl+
STM2043_1314_1348	0.04	2.19	1253564lpduGlpropanediol dehydratase reactivation proteinl+
STM2045_61_95	0.01	4.03	1253566lpduJlpolyhedral body proteinl+
STM2047_17_51	0.02	2.33	1253568lpduLlpopropanediol utilization proteinl+
STM2048_9_43	0.04	1.55	1253569lpduMlpopropanediol utilization proteinl+
STM2049_23_57	0.25	-1.33	1253570lpduNlpolyhedral body proteinl+
STM2051_1164_1198	0.15	1.35	1253572lpduPICOA-dependent propionaldehyde dehydrogenasel+
STM2055_141_175	0.90	-1.02	1253576lpduUlpolyhedral body proteinl+
STM2056_401_435	0.94	-1.01	1253577lpduVlpopropanediol utilization proteinl+
STM2057_216_250	0.91	-1.01	1253578lpduWlpropionate kinasel+
STM2058_785_819	0.05	2.13	1253579lpduXlpropanediol utilization proteinl+
STM2059_161_195	0.73	1.06	1253580lyeeXlhypothetical proteinl-

STM2060_604_638	0.37	1.11	1253581lyeeAlputative inner membrane proteinl-
STM2061_225_259	0.01	-2.68	1253582lsbmCIDNA gyrase inhibitorl-
STM2062_1118_1152	0.01	2.41	1253583ldacDID-alanyl-D-alanine carboxypeptidasel-
STM2063_265_299	0.37	1.07	1253584lphsClthiosulfate reductase cytochrome B subunitl-
STM2064_97_131	0.14	1.21	1253585lphsBlthiosulfate reductase electron transport proteinl-
STM2066_2198_2232	0.03	1.40	1253587lsopAlsecreted effector proteinl+
STM2067_768_802	0.12	-1.25	1253588lsbcBlexonuclease II+
STM2069_129_163	0.01	1.48	1253590lyeeYlputative transcriptional regulatorl-
STM2070_9_43	0.29	-1.09	1253591lyeeZlputative dehydratasel-
STM2071_129_163	0.27	-1.15	1253592lhisGlATP phosphoribosyltransferasel+
STM2072_946_980	0.27	1.08	1253593lhisDlhistidinol dehydrogenasel+
STM2073_861_895	0.14	-1.36	1253594lhisClhistidinol-phosphate aminotransferasel+
STM2074_453_487	0.27	-1.11	1253595lhisBlimidazole glycerol-phosphate dehydratase/histidinol phosphatasel+
STM2075_161_195	0.93	1.01	1253596lhisHlimidazole glycerol phosphate synthase subunit HisHl+
STM2076_497_531	0.33	1.17	1253597lhisAl1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino] imidazole-4-carboxamide isomerasel+
STM2077_65_99	0.44	1.14	1253598lhisFlimidazole glycerol phosphate synthase subunit HisFl+
STM2078_129_163	0.68	1.04	1253599lhisIlbifunctional phosphoribosyl-AMP cyclohydrolase/phosphoribosyl-ATP pyrophosphatase proteinl+
STM2080_696_730	0.01	2.48	1253601ludglUDP-glucose/GDP-mannose dehydrogenasel-
STM2081_824_858	0.21	-1.25	1253602lgndl6-phosphogluconate dehydrogenasel-
STM2082_928_962	0.01	-1.45	1253603lrbPlundecaprenol-phosphate galactosephosphotransferase/O-antigen transferasel-
STM2083_1023_1057	0.98	-1.00	1253604lrbkIphosphomannomutasel-
STM2084_1193_1227	0.03	-1.54	1253605lrbmImannose-1-phosphate guanylyltransferasel-
STM2085_321_355	0.09	1.29	1253606lrbnIrharnnosyl transferasel-
STM2086_71_105	0.73	1.08	1253607lrbuIumannosyl transferasel-
STM2087_363_399	0.15	1.31	1253608lrbvIabequosyltransferasel-
STM2088_845_881	0.04	2.22	1253609lrbxIputative O-antigen transferasel-
STM2089_556_590	0.26	-1.16	1253610lrbjICDP-abequose synthasel-
STM2090_779_813	0.11	-1.19	1253611lrbhICDP-6-deoxy-D-xylo-4-hexulose-3-dehydrasel-
STM2091_593_627	0.01	-1.68	1253612lrbgICDP glucose 4 6-dehydratasel-
STM2092_385_419	0.03	-1.86	1253613lrbfIglucose-1-phosphate cytidylyltransferasel-
STM2093_81_115	0.02	-1.87	1253614lrbllICDP-6-deoxy-delta-3 4-glucoseen reductasel-
STM2094_513_547	0.03	-1.55	1253615lrbcIcdTDP-4 deoxyrhamnose 3 5 epimerasel-

STM2095_145_179	0.04	-1.27	1253616lrfbAldTDP-glucose pyrophosphorylasel-
STM2096_129_163	0.09	-1.23	1253617lrfbDldTDP-4-dehydrorhamnose reductasel-
STM2097_247_281	0.04	1.63	1253618lrfbBldTDP-glucose 4 6 dehydratasel-
STM2098_17_51	0.02	-1.94	1253619lgalFIUTP--glucose-1-phosphate uridylyltransferase subunit GalFI-
STM2099_693_727	0.01	1.99	1253620lwcaMlputative colanic acid biosynthetic proteinl-
STM2100_478_512	0.08	1.91	1253621lwcaLlputative glycosyl transferasel-
STM2101_634_668	0.09	-1.18	1253622lwcaKlputative pyruvyl transferasel-
STM2102_792_826	0.22	1.22	1253623lwzxClcolanic acid exporterl-
STM2103_780_814	0.39	1.10	1253624lwcaJlputative UDP-glucose lipid carrier transferasel-
STM2104_932_966	0.02	-1.48	1253625lcpsGlpshomannomutasel-
STM2106_513_547	0.03	2.41	1253627lwcallpredicted glycosyl transferasel-
STM2107_326_360	0.63	1.03	1253628lwcaHlGDP-mannose mannosyl hydrolasel-
STM2108_481_515	0.18	1.15	1253629lwcaGIGDP-fucose synthetasel-
STM2109_283_317	0.06	1.85	1253630lgmldlGDP-D-mannose dehydratasel-
STM2111_153_187	0.21	1.22	1253632lwcaElpredicted glycosyl transferasel-
STM2112_936_970	0.01	1.31	1253633lwcaDlputative colanic acid polymerasel-
STM2113_219_253	0.91	-1.02	1253634lwcaClpredicted glycosyl transferasel-
STM2114_193_227	0.17	1.47	1253635lwcaBlputative colanic acid biosynthesis acetyltransferase WcaBl-
STM2115_249_283	0.15	1.18	1253636lwcaAlpredicted glycosyl transferasel-
STM2116_1673_1707	0.01	1.31	1253637lwzcltyrosine kinasel-
STM2117_209_243	0.29	1.61	1253638lwzblytrosine phosphatasel-
STM2118_429_463	0.13	1.41	1253639lwzalputative outer membrane polysaccharide export proteinl-
STM2119_886_920	0.86	1.02	1253640lyegHlputative inner membrane proteinl+
STM2120_1498_1532	0.01	-1.86	1253641lasmAlputative assembly proteinl-
STM2121_145_179	0.03	-1.94	1253642ldcdldeoxycytidine triphosphate deaminasel-
STM2122_257_291	0.04	-1.41	1253643ludkluridine kinasel-
STM2123_2600_2634	0.07	-1.21	1253644lyegElputative diguanylate cyclase/phosphodiesterasel+
STM2127_2252_2286	0.02	2.58	1253648lyegNlmultidrug efflux system subunit MdtBl+
STM2128_2146_2180	0.12	-1.21	1253649lyegOlmultidrug efflux system subunit MdtCl+
STM2129_958_992	0.40	1.09	1253650lyegBlmultidrug efflux system protein MdtEl+
STM2130_661_695	0.04	1.53	1253651lbaeSlsignal transduction histidine-protein kinase BaeSl+
STM2131_113_147	0.34	1.08	1253652lbaeRIDNA-binding response regulator in two-component regulatory system with BaeSl+
STM2133_705_739	0.07	1.72	1253654lSTM2133lputative cytoplasmic proteinl+
STM2134_185_219	0.05	2.44	1253655lSTM2134lputative inner membrane proteinl+
STM2135_1481_1515	0.04	1.29	1253656lSTM2135lputative inner membrane proteinl+

STM2136_747_781	0.01	-1.63	1253657lyegQlputative proteasel+
STM2137_884_918	0.68	-1.07	1253658lSTM2137lputative cytoplasmic proteinl+
STM2138_104_142	0.47	-1.13	1253659lSTM2138lputative cytoplasmic proteinl-
STM2139_189_223	0.02	1.52	1253660lSTM2139lputative inner membrane proteinl-
STM2139.2n_49_83	0.69	1.05	2673733lSTM2139.2nlhypothetical proteinl-
STM2140_49_83	0.93	-1.02	1253661lyegSlipid kinasel+
STM2141_118_152	0.77	-1.05	1253662lfbaBlfructose-bisphosphate aldolasel-
STM2142_433_467	0.03	1.41	1253663lyegTlputative transport proteinl+
STM2143_6_40	0.14	1.42	1253664lyegUlputative glycohydrolasel+
STM2144_529_563	0.20	1.16	1253665lyegVlputative sugar kinasel+
STM2145_537_571	0.01	1.69	1253666lyegWlputative regulatory proteinl-
STM2146_385_419	0.00	1.89	1253667lthiDlphosphomethylpyrimidine kinasel-
STM2148_137_171	0.01	2.49	1253669lSTM2148lputative periplasmic proteinl+
STM2149_289_323	0.07	-1.24	1253670lstcDlputative outer membrane lipoproteinl-
STM2150_1891_1925	0.02	1.44	1253671lstcClputative outer membrane proteinl-
STM2151_105_139	0.02	2.33	1253672lstcBlputative periplasmic chaperone proteinl-
STM2152_345_379	0.04	1.80	1253673lstcAlputative fimbrial-like proteinl-
STM2153_201_235	0.00	6.82	1253674lyehElputative outer membrane proteinl-
STM2154_639_673	0.32	-1.14	1253675lmrplputative ATPasel-
STM2155_1467_1501	0.00	-2.19	1253676lmetGlmethionyl-tRNA synthetasel+
STM2156_213_247	0.06	2.13	1253677lyehRlputative lipoproteinl+
STM2156A_321_355	0.15	1.38	1253678lSTM2156Alhypothetical proteinl+
STM2157_321_355	0.03	-1.42	1253679lyehSlputative cytoplasmic proteinl-
STM2158_121_155	0.01	-2.24	1253680lyehTlputative two-component response-regulatory protein YehTl-
STM2159_1327_1361	0.04	-1.74	1253681lyehUlputative sensor kinasel-
STM2160_209_243	0.03	-1.61	1253682lyehVlputative transcriptional repressorl+
STM2161_25_59	0.44	-1.09	1253683lSTM2161lputative inner membrane proteinl+
STM2162_601_635	0.02	1.80	1253684lyehWlputative ABC-type proline/glycine betaine transport system permease componentl-
STM2163_321_355	0.02	-2.03	1253685lyehXlputative ABC-type proline/glycine betaine transport system ATPase componentl-
STM2164_1067_1101	0.02	-1.23	1253686lyehYlputative ABC-type proline/glycine betaine transport system permease componentl-
STM2165_81_115	0.26	-1.13	1253687lyehZlputative transport proteinl-
STM2166_2227_2261	0.48	1.05	1253688lbglXlperiplasmic beta-D-glucoside glucohydrolasel-
STM2167_876_910	0.26	1.14	1253689ldldID-lactate dehydrogenasel+

STM2168_817_851	0.02	1.59	1253690 ppbGID-alanyl-D-alanine endopeptidasel-
STM2169_161_195	0.04	1.70	1253691 yohClputative transport proteinl-
STM2170_201_235	0.75	-1.04	1253692 yohDlhypothetical proteinl+
STM2171_273_307	0.08	-1.34	1253693 yohFlacetoin dehydrogenasel-
STM2172_646_680	0.02	1.43	1253694 yohGlmultidrug resistance outer membrane protein MdtQl-
STM2174_785_819	0.76	-1.03	1253696 yohlltRNA-dihydrouridine synthase Cl-
STM2176_529_563	0.31	-1.19	1253698 STM2176lputative glutathione S-transferasel-
STM2177_649_683	0.02	-1.67	1253699 STM2177lputative flutathione S-transferasel-
STM2178_327_361	0.05	1.95	1253700 STM2178lputative 1,2-dioxygenasel-
STM2179_824_858	0.10	-1.42	1253701 STM2179lputative sugar transporterl-
STM2181_337_371	0.00	3.65	1253703 yohJlhypothetical proteinl+
STM2182_289_323	0.07	1.54	1253704 yohKlpredicted inner membrane proteinl+
STM2183_849_883	0.01	2.58	1253705 cddlcytidine deaminasel+
STM2184_465_499	0.05	1.53	1253706 sanAlhypothetical proteinl+
STM2185_121_155	0.35	-1.04	1253707 b2145lputative inner membrane proteinl+
STM2186_507_541	0.02	-1.86	1253708 STM2186lputative oxidoreductasel+
STM2187_1037_1071	0.02	-1.59	1253709 yeiAldihydropyrimidine dehydrogenasel+
STM2188_524_558	0.01	-2.53	1253710 mgICbeta-methylgalactoside transporter inner membrane componentl-
STM2189_1034_1068	0.03	-2.03	1253711 mgIAlgalactose/methyl galactoside transporter ATP-binding proteinl-
STM2190_817_851	0.00	-10.12	1253712 mgIBgalactose transport proteinl-
STM2191_856_890	0.00	-4.75	1253713 galSIDNA-binding transcriptional repressorl-
STM2192_400_434	0.65	1.04	1253714 yeiBlhypothetical proteinl-
STM2193_513_547	0.03	-1.52	1253715 folEIGTP cyclohydrolase II-
STM2194_643_677	0.18	1.24	1253716 yeiGlputative esterasel+
STM2195_25_59	0.05	1.44	1253717 STM2195lputative transcriptional regulatorl-
STM2196_1265_1299	0.03	1.65	1253718 STM2196lputative L-serine dehydratasel-
STM2197_633_667	0.04	2.68	1253719 STM2197lputative phosphoserine phosphatasel+
STM2198_356_390	0.49	1.13	1253720 STM2198lputative regulatory proteinl+
STM2199_1185_1219	0.08	-1.29	1253721 cirAlferric iron-catecholate outer membrane transporterl-
STM2200_1119_1153	0.01	-1.73	1253722 lysPlysine transporterl-
STM2201_257_291	0.50	-1.21	1253723 yeiElputative DNA-binding transcriptional regulatorl-
STM2202_307_341	0.38	-1.17	1253724 yeiHlputative inner membrane proteinl+
STM2203_785_819	0.02	1.58	1253725 folendonuclease IVl+
STM2204_1246_1280	0.03	1.29	1253726 fruAlfructose-specific PTS system IIBC componentl-
STM2205_385_419	0.37	-1.09	1253727 fruKI1-phosphofructokinasel-

STM2206_692_726	0.03	-1.63	1253728lfruFlfructose-specific PTS IIA/HPr componentsl-
STM2208_536_570	0.50	-1.07	1253730lSTM2208lputative inner membrane proteinl-
STM2209.1c_93_127	0.04	1.29	2673743lSTM2209.1chlhypothetical proteinl-
STM2212_513_547	0.04	-1.54	1253734lyeiRlputative cobalamin biosynthetic proteinl+
STM2213_289_323	0.01	-1.61	1253735lyeiUlputative permeasel+
STM2214_457_491	0.00	-2.98	1253736lsprlputative lipoproteinl+
STM2215_942_976	0.01	1.90	1253737l rtnlhypothetical proteinl+
STM2216_1655_1689	0.02	-1.71	1253738lyejAlputative ABC transporter periplasmic binding proteinl+
STM2217_752_786	0.02	2.73	1253739lyejBlputative ABC-type dipeptide/oligopeptide/nickel transport system permeasel+
STM2218_731_765	0.03	1.24	1253740lyejElputative ABC-type dipeptide/oligopeptide/nickel transport system permease componentl+
STM2219_1359_1393	0.01	1.75	1253741lyejFlputative ABC-type transport system ATPase componentl+
STM2220_17_51	0.04	-1.46	1253742lyejGlhypothetical proteinl-
STM2221_960_994	0.09	1.49	1253743lbcrlbicyclomycin/multidrug efflux systeml-
STM2222_193_227	0.83	1.02	1253744lrsuAl16S rRNA pseudouridylate synthase Al-
STM2223_954_988	0.16	1.07	1253745lyejHlputative ATP-dependent helicasel+
STM2224_69_103	0.03	-1.92	1253746lrplY150S ribosomal protein L25l+
STM2225_273_307	0.01	-2.03	1253747lSTM2225lputative inner membrane proteinl-
STM2226_265_299	0.02	-2.18	1253748lyejKlnucleoid-associated protein NdpAl-
STM2227_117_151	0.04	-1.27	1253749lyejLlputative cytoplasmic proteinl+
STM2228_794_828	0.04	-1.26	1253750lyejMlputative hydrolasel+
STM2230.1c_121_155	0.82	-1.04	1253752lSTM2230.1chlDNA polymerase V subunitl-
STM2232_1399_1433	0.02	2.02	1253754loafAIO-antigen acetylasel+
STM2233_53_87	0.01	4.10	1253755lSTM2233lputative cytoplasmic proteinl-
STM2235_339_373	0.00	4.46	1253757lSTM2235lhypothetical proteinl-
STM2236_65_99	0.01	3.42	1253758lSTM2236lhypothetical proteinl-
STM2237_65_99	0.02	2.64	1253759lSTM2237lputative inner membrane proteinl-
STM2238_369_403	0.23	1.30	1253760lSTM2238lhypothetical proteinl+
STM2239_113_147	0.02	2.52	1253761lSTM2239lputative phage antiterminatorl-
STM2240_457_491	0.02	2.38	1253762lSTM2240lputative cytoplasmic proteinl-
STM2241_1920_1954	0.32	2.25	1253763lsspH2lleucine-rich repeat proteinl-
STM2242_13_47	0.06	1.79	1253764lSTM2242lputative phage tail fiber proteinl-
STM2243_673_707	0.25	1.81	1253765lSTM2243lputative tail fiber protein of phagel-
STM2244_87_122	0.03	3.07	1253766lSTM2244lvirulence proteinl+
STM2245_289_323	0.00	3.00	1253767lSTM2245lputative outer membrane proteinl-

STM2246_305_339	0.37	-1.15	1253768InarPIDNA-binding response regulator in two-component regulatory system with NarQ or NarXl+
STM2247_884_918	0.63	1.03	1253769IccmHlputative heme lyase subunitl-
STM2248/STM3813_355_38	0.00	1.22	1253770/1255340IccmG/ccmGlheme lyase/disulfide oxidoreductasel-
STM2249/STM3814_1805_1	0.11	-1.23	1253771/1255341IccmF/ccmFlcytochrome c-type biogenesis proteinl-
STM2252/STM3817_497_53	0.92	-1.01	1253774/1255344IccmC/ccmClheme exporter proteinl-
STM2253/STM3818_543_57	0.01	-1.71	1253775/1255345IccmB/ccmBlheme exporter proteinl-
STM2255_9_43	0.58	1.07	1253777InapClcytochrome c-type protein NapCl-
STM2256_389_423	0.83	-1.07	1253778InapBldiheme cytochrome c550l-
STM2257_73_107	0.35	-1.15	1253779InapHlquinol dehydrogenase membrane componentl-
STM2258_445_479	0.02	1.44	1253780InapGlquinol dehydrogenase periplasmic componentl-
STM2259_2368_2402	0.05	-1.26	1253781InapAlperiplasmic nitrate reductasel-
STM2261_353_387	0.73	-1.11	1253783InapFlferredoxin-type proteinl-
STM2262_193_227	0.00	2.67	1253784Icolecoletin precursorl+
STM2263_693_727	0.13	-1.29	1253785IyojIlmultidrug transporter membrane component/ATP-binding componentl-
STM2264_281_315	0.22	1.09	1253786IalkBIDNA repair system proteinl-
STM2266_846_880	0.05	-1.16	1253788IapbElthiamine biosynthesis lipoprotein ApbEl-
STM2267_746_780	0.02	-2.67	1253789ImopClouter membrane porin protein Cl-
STM2268_17_51	0.90	-1.01	1253790ImicFlmisc_RNAI-
STM2269_2567_2601	0.22	-1.28	1253791IyojNlphosphotransfer intermediate protein in two-component regulatory system with RcsBCl+
STM2270_129_163	0.06	-1.48	1253792IrcsBIDNA-binding response regulator in two-component regulatory system with RcsC and YojNl+
STM2271_2288_2322	0.09	1.39	1253793IrcsClhybrid sensory kinase in two-component regulatory system with RcsB and YojNl-
STM2272_2350_2384	0.02	-2.41	1253794IgyrAIDNA gyrase subunit Al-
STM2273_468_502	0.26	1.32	1253795ISTM2273lputative dehydratasel-
STM2274_1087_1121	0.17	2.01	1253796ISTM2274lputative permeasel-
STM2275_497_531	0.00	2.38	1253797ISTM2275lputative regulatory proteinl+
STM2276_673_707	0.03	2.05	1253798IubiGI3-demethylubiquinone-9 3-methyltransferasel+
STM2277_2087_2121	0.35	-1.23	1253799InrdAlribonucleotide-diphosphate reductase subunit alphal+
STM2278_452_486	0.03	1.40	1253800InrdBlribonucleotide-diphosphate reductase subunit betal+
STM2279_145_179	0.09	-1.61	1253801IyfaEl2Fe-2S ferredoxin YfaEl+
STM2280_272_306	0.03	1.15	1253802ISTM2280lputative permeasel-
STM2281_129_163	0.22	1.44	1253803ISTM2281lputative transcriptional regulatorl+

STM2282_840_874	0.01	-11.80	1253804lglpQlglycerophosphodiester phosphodiesterasel-
STM2283_1080_1114	0.21	-1.43	1253805lglpTlsn-glycerol-3-phosphate transporterl-
STM2284_758_792	0.00	-14.13	1253806lglpAlsn-glycerol-3-phosphate dehydrogenase subunit Al+
STM2285_517_551	0.00	-8.86	1253807lglpBlanaerobic glycerol-3-phosphate dehydrogenase subunit Bl+
STM2286_368_402	0.00	-6.04	1253808lglpCln-glycerol-3-phosphate dehydrogenase subunit Cl+
STM2287_817_851	0.14	3.14	1253809lsseLldeubiquitinasel+
STM2288_34_68	0.01	-1.68	1253810lSTM2288lputative cytoplasmic proteinl-
STM2289_577_611	0.02	-1.94	1253811lSTM2289lputative aldolasel-
STM2290_867_901	0.05	-1.41	1253812lyfaVlputative transport proteinl-
STM2291_347_381	0.02	-2.36	1253813lyfaWlputative galactonate dehydratasel-
STM2292_193_227	0.00	-2.30	1253814lyfaXlputative transcriptional regulatorl-
STM2293_806_840	0.28	1.10	1253815lSTM2293lcompetence damage-inducible protein Al-
STM2294_17_51	0.03	2.31	1253816lyfaZlputative inner membrane proteinl-
STM2295_205_239	0.13	-1.21	1253817lyfaOlputative NTP pyrophosphohydrolasel+
STM2296_513_547	0.19	1.43	1253818laislaluminum-inducible proteinl-
STM2297_533_567	0.03	1.52	1253819lyfbElUDP-4-amino-4-deoxy-L-arabinose--oxoglutarate aminotransferasel+
STM2298_833_867	0.02	1.49	1253820lpmrFlundecaprenyl phosphate 4-deoxy-4-formamido-L-arabinose transferasel+
STM2299_1816_1850	0.02	1.86	1253821lyfbGlbifunctional UDP-glucuronic acid decarboxylase/UDP-4-amino-4-deoxy-L-arabinose formyltransferasel+
STM2300_577_611	0.13	1.14	1253822lSTM2300lputative cytoplasmic proteinl+
STM2301_1416_1450	0.02	-1.54	1253823larnTl4-amino-4-deoxy-L-arabinose transferasel+
STM2302_181_215	0.87	-1.02	1253824lSTM2302lputative inner membrane proteinl+
STM2303_269_303	0.00	1.43	1253825lSTM2303lhypothetical proteinl+
STM2304_105_139	0.01	4.17	1253826lpmrDlpolymyxin resistance protein Bl-
STM2305_1081_1115	0.01	-1.65	1253827lmenEIO-succinylbenzoic acid--CoA ligasel-
STM2306_561_595	0.10	1.14	1253828lmenCIO-succinylbenzoate synthasel-
STM2307_129_163	0.05	-1.19	1253829lmenBlnaphthoate synthasel-
STM2308_113_147	0.03	-2.26	1253830lyfbBlacyl-CoA thioester hydrolase YfbBl-
STM2309_896_930	0.03	-1.64	1253831lmenDl2-succinyl-6-hydroxy-2 4-cyclohexadiene-1-carboxylic acid synthase/2-oxoglutarate decarboxylasel-
STM2311_169_203	0.81	-1.03	1253833lelaBlhypothetical proteinl-
STM2312_81_115	0.62	-1.04	1253834lelaAlhypothetical proteinl-
STM2313_433_467	0.01	-1.49	1253835lelaClribonuclease Zl+
STM2314_67_101	0.43	-1.08	1253836lSTM2314lputative chemotaxis signal transduction proteinl+

STM2315_1263_1297	0.01	1.62	1253837lyfbKlhypothetical proteinl-
STM2316.S_971_1005	0.01	-2.18	1253838lnuoNINADH dehydrogenase subunit NI-
STM2317_915_949	0.01	-1.41	1253839lnuoMINADH dehydrogenase subunit MI-
STM2318_1639_1673	0.01	-1.73	1253840lnuoLINADH dehydrogenase subunit LI-
STM2319_163_197	0.01	-2.01	1253841lnuoKINADH dehydrogenase subunit KI-
STM2320_65_99	0.00	-2.24	1253842lnuoJINADH dehydrogenase subunit JI-
STM2321_441_475	0.06	-1.45	1253843lnuoINADH dehydrogenase subunit II-
STM2322_929_963	0.01	-1.57	1253844lnuoHINADH dehydrogenase subunit HI-
STM2323.S_2568_2602	0.00	-2.06	1253845lnuoGINADH dehydrogenase subunit GI-
STM2324_1155_1189	0.67	1.03	1253846lnuoFINADH dehydrogenase I subunit FI-
STM2325_213_247	0.98	-1.00	1253847lnuoEINADH dehydrogenase subunit EI-
STM2326_820_854	0.60	-1.08	1253848lnuoCbfunctional NADH:ubiquinone oxidoreductase subunit C/DI-
STM2327_417_451	0.11	-1.25	1253849lnuoBINADH dehydrogenase subunit BI-
STM2328_129_163	0.05	-1.26	1253850lnuoAINADH dehydrogenase subunit AI-
STM2329_41_75	0.13	2.53	1253851lSTM2329lputative cytoplasmic proteinl-
STM2330_385_419	0.01	2.23	1253852llrhAINADH dehydrogenase transcriptional repressorl-
STM2331_232_266	0.29	1.12	1253853lyfbQlaminotransferase AlaTl+
STM2332_193_227	0.06	1.98	1253854lSTM2332lhypothetical proteinl+
STM2333_988_1022	0.77	-1.03	1253855lyfbSlputative response regulatorl-
STM2334_33_67	0.27	1.24	1253856lyfbTlputative phosphatasel-
STM2335_297_331	0.03	1.54	1253857lyfbUlhypothetical proteinl-
STM2336_257_291	0.43	1.05	1253858lSTM2336lhypothetical proteinl-
STM2337_460_494	0.02	1.47	1253859lackAlacetate kinasel+
STM2338_1626_1660	0.37	1.24	1253860lptalphosphate acetyltransferasel+
STM2340_673_707	0.02	-2.02	1253862lSTM2340lputative transketolasel-
STM2341_225_259	0.00	-4.17	1253863lSTM2341lputative transketolasel-
STM2342_527_561	0.01	-3.77	1253864lulaAlascorbate-specific PTS system enzyme IIICl-
STM2344_265_299	0.02	-1.85	1253866lSTM2344lputative phosphotransferase system enzyme II A componentl-
STM2345_21_55	0.05	1.32	1253867lSTM2345lputative transcriptional regulatorl+
STM2346_9_43	0.01	-1.51	1253868lSTM2346lputative NTP pyrophosphohydrolasel-
STM2347_97_131	0.08	-1.33	1253869lyfcElphosphodiesterasel-
STM2348_345_379	0.02	2.95	1253870lyfcFlputative glutathione S-transferasel-
STM2349_385_419	0.17	1.24	1253871lyfcGlpitative glutathione S-transferasel+
STM2350_385_419	0.07	1.23	1253872lyfcHlputative sugar nucleotide epimerasel+
STM2351_353_387	0.00	-1.28	1253873lhisPlhistidine/lysine/arginine/ornithine transporter subunitl-

STM2352_577_611	0.30	1.20	1253874 hisM histidine/lysine/arginine/ornithine transport proteinl-
STM2353_209_243	0.01	-1.51	1253875 hisQ histidine/lysine/arginine/ornithine transport proteinl-
STM2354_81_115	0.00	-3.61	1253876 hisJ histidine transport proteinl-
STM2355_269_303	0.03	-2.08	1253877 argT lysine/arginine/ornithine transport proteinl-
STM2356_377_411	0.79	1.03	1253878 ubiX 3-octaprenyl-4-hydroxybenzoate carboxy-lyasel-
STM2357_870_904	0.00	-1.41	1253879 STM2357 putative amino acid transporterl-
STM2358_617_651	0.90	1.02	1253880 STM2358 putative cytoplasmic proteinl-
STM2359_1079_1113	0.02	1.70	1253881 STM2359 putative amino acid transporterl-
STM2360_871_905	0.02	1.60	1253882 STM2360 putative diaminopimelate decarboxylasel-
STM2361_629_663	0.48	-1.32	1253883 STM2361 putative regulatory proteinl+
STM2362_1031_1065	0.01	-3.34	1253884 purF amidophosphoribosyltransferasel-
STM2363_133_167	0.03	-2.25	1253885 cvpA colicin V production proteinl-
STM2364_273_307	0.19	1.14	1253886 dedD hypotheical proteinl-
STM2365_1038_1072	0.04	-1.66	1253887 folC functional folylpolyglutamate synthase/ dihydrofolate synthasel-
STM2366_129_163	0.04	-1.32	1253888 accD acetyl-CoA carboxylase subunit betaI-
STM2367_257_291	0.09	1.28	1253889 dedA hypotheical proteinl-
STM2368_561_595	0.59	-1.04	1253890 truA tRNA pseudouridine synthase AI-
STM2369_527_561	0.17	-1.28	1253891 usgI hypotheical proteinl-
STM2371_723_757	0.01	-1.80	1253893 flkI predicted flagella assembly proteinl+
STM2372_332_366	0.01	-1.96	1253894 STM2372 hypotheical proteinl-
STM2373_65_99	0.40	1.44	1253895 STM2373 putative cytoplasmic proteinl-
STM2374_65_99	0.02	2.92	1253896 STM2374 putative regulatory proteinl+
STM2376_177_211	0.60	-1.02	1253898 STM2376 putative periplasmic proteinl+
STM2377_257_291	0.02	2.01	1253899 STM2377 putative inner membrane proteinl-
STM2378_504_538	0.12	-1.14	1253900 fabB 3-oxoacyl-(acyl carrier protein) synthase II-
STM2379_1610_1644	0.01	1.66	1253901 mnmC 5-methylaminomethyl-2-thiouridine methyltransferasel+
STM2380_33_67	0.29	-1.29	1253902 yfcL putative cytoplasmic proteinl-
STM2381_129_163	0.46	-1.09	1253903 yfcM putative cytoplasmic proteinl-
STM2382_513_547	0.40	-1.09	1253904 yfcA hypotheical proteinl-
STM2383_417_451	0.10	-1.13	1253905 mepA penicillin-insensitive murein endopeptidasel-
STM2384_487_521	0.02	1.74	1253906 aroC chorismate synthasel-
STM2385_129_163	0.07	-1.51	1253907 yfcB N5-glutamine S-adenosyl-L-methionine-dependent methyltransferasel-
STM2386_193_227	0.04	1.95	1253908 yfcN hypotheical proteinl+
STM2387_321_355	0.02	1.90	1253909 sixA phosphohistidine phosphatasel-

STM2388_1853_1887	0.63	1.06	1253910lfadJlmultifunctional fatty acid oxidation complex subunit alphal-
STM2390_177_211	0.00	3.95	1253912lyfcZlputative cytoplasmic proteinl-
STM2391_1051_1085	0.00	-26.78	1253913lfadLllong-chain fatty acid outer membrane transporterl+
STM2392_641_675	0.28	-1.14	1253914lvacJllipoprotein precursorl-
STM2393_593_627	0.28	1.18	1253915lyfdClhypothetical proteinl+
STM2394_31_65	0.43	1.52	1253916largWtRNAI+
STM2395_353_387	0.01	2.81	1253917lpgtElouter membrane proteasel-
STM2396_569_603	0.00	-2.53	1253918lpgtAlactivatorl-
STM2397_1968_2002	0.00	-2.50	1253919lpgtBlphosphoglycerate transport system sensor proteinl-
STM2398_915_949	0.05	-1.34	1253920lpgtClphosphoglycerate transport regulatory protein precursorl-
STM2399_1065_1099	0.00	-2.72	1253921lpgtPltransporterl+
STM2400_189_223	0.69	1.04	1253922lSTM2400lputative inner membrane proteinl-
STM2401_699_733	0.03	1.71	1253923lddgllipid A biosynthesis palmitoleoyl acyltransferasel-
STM2402_720_754	0.10	-1.49	1253924lyfdZlaminotransferasel-
STM2403_129_163	0.78	-1.03	1253925lgIkglglucokinasel-
STM2404_1101_1135	0.01	-1.11	1253926lSTM2404lhypothetical proteinl+
STM2405_862_896	0.04	1.44	1253927lSTM2405lindolepyruvate decarboxylasel-
STM2406_881_915	0.01	1.74	1253928lSTM2406lputative oxidoreductasel+
STM2407_97_131	0.31	1.09	1253929lypeClputative periplasmic proteinl+
STM2408_691_725	0.07	-1.39	1253930lmntHlmanganese transport protein MntHl-
STM2409_908_942	0.00	-4.12	1253931lnupChnucleoside transportl+
STM2410_1575_1609	0.16	-1.13	1253932lyfeAlhypothetical proteinl-
STM2413_33_67	0.04	-2.50	1253935lyfeClputative negative regulatorl+
STM2414_137_171	0.00	-1.87	1253936lyfeDlputative negative regulatorl+
STM2415_593_627	0.71	-1.06	1253937lgltXlglutamyl-tRNA synthetasel-
STM2420_161_195	0.51	1.12	1253942lxapRIDNA-binding transcriptional activatorl-
STM2420.1n_8_46	0.69	1.48	2673749lSTM2420.1nhypothetical proteinl-
STM2421_514_548	0.11	1.59	1253943lxapBlxanthosine permeasel-
STM2423_321_355	0.08	1.56	1253945lyfeNlhypothetical proteinl+
STM2424_577_611	0.13	1.73	1253946lyfeRlputative transcriptional regulatorl-
STM2425_17_51	0.61	1.07	1253947lyfeHlputative Na+-dependent transporterl+
STM2426_24_58	0.03	-1.23	1253948lSTM2426lputative cytoplasmic proteinl-
STM2427_1753_1787	0.79	-1.07	1253949lligAINAD-dependent DNA ligase LigAl-
STM2428_97_131	0.05	1.25	1253950lzipAlcell division protein ZipAl-
STM2429_649_683	0.94	1.01	1253951lcysZlputative sulfate transport protein CysZl+
STM2430_265_299	0.28	1.59	1253952lcysKlcysteine synthase Al+

STM2431_209_243	0.34	1.21	1253953lptsHlphosphohistidinoprotein-hexose phosphotransferase component of PTS system (Hpr)l+
STM2432_1657_1691	0.01	1.53	1253954lptslphosphoenolpyruvate-protein phosphotransferasel+
STM2433_241_275	0.27	1.27	1253955lcrrlglucose-specific PTS system componentl+
STM2434_123_157	0.02	1.90	1253956lSTM2434lputative cytoplasmic proteinl-
STM2435_321_355	0.24	1.45	1253957lpdxKlpyridoxal kinasel-
STM2436_422_456	0.94	1.02	1253958lptsJlputative regulatory proteinl+
STM2437_129_163	0.01	1.62	1253959lyfeJlglutamine amidotransferasel+
STM2438_141_175	0.02	2.15	1253960lyfeKlhypothetical proteinl+
STM2439_89_123	0.64	1.15	1253961lyfeLlputative membrane carboxypeptidasel+
STM2440_849_883	0.06	-1.84	1253962lcysMlcysteine synthase Bl-
STM2441_163_197	0.91	-1.05	1253963lcysAlsulfate/thiosulfate transporter subunitl-
STM2442_105_139	0.59	1.27	1253964lcysWlsulfate/thiosulfate transporter permease subunitl-
STM2443_425_459	0.15	1.93	1253965lcysUlsulfate/thiosulfate transporter subunitl-
STM2444_338_372	0.18	1.93	1253966lcysPlthiosulfate transporter subunitl-
STM2445_513_547	0.00	-8.21	1253967lucpAlshort chain dehydrogenasel-
STM2446_113_147	0.16	-1.28	1253968lSTM2446lputative iron-dependent peroxidasel-
STM2447_417_451	0.02	1.85	1253969lSTM2447lhypothetical proteinl-
STM2448_385_419	0.04	1.34	1253970lyfeZlputative inner membrane proteinl-
STM2449.S_105_139	0.09	1.46	1253971lSTM2449.Slputative acetyltransferasel-
STM2450_705_739	0.13	1.45	1253972lamiAIN-acetylmuramoyl-l-alanine amidase II+
STM2451_617_651	0.10	1.78	1253973lhemFlcoproporphyrinogen III oxidasel+
STM2453_983_1017	0.72	1.03	1253975lSTM2453lputative cytoplasmic proteinl+
STM2454_118_152	0.01	-1.97	1253976leutRltranscriptional regulator EutRl-
STM2455_81_115	0.01	-1.76	1253977leutKlputative carboxysome structural proteinl-
STM2456_545_579	0.01	-1.80	1253978leutLlputative carboxysome structural proteinl-
STM2457_301_335	0.69	1.14	1253979leutClethanolamine ammonia-lyase small subunitl-
STM2458_1067_1101	0.18	-1.09	1253980leutBlethanolamine ammonia-lyase heavy chainl-
STM2459_597_631	0.61	1.07	1253981leutAlreactivating factor for ethanolamine ammonia lyasel-
STM2460_1092_1126	0.40	1.11	1253982leutHlputative transport proteinl-
STM2461_933_967	0.19	1.12	1253983leutGlputative transport proteinl-
STM2462_345_379	0.05	-1.35	1253984leutJlethanolamine utilization proteinl-
STM2464_233_267	0.06	-1.10	1253986leutNlputative detox proteinl-
STM2465_37_71	0.03	-1.44	1253987leutMlputative detox proteinl-
STM2466_346_380	0.06	-1.68	1253988leutDlphosphotransacetylasel-
STM2468_497_531	0.17	-1.42	1253990leutQlputative ethanolamine utilization proteinl-

STM2469_233_267	0.02	1.85	1253991leutPlputative ethanolamine utilization proteinl-
STM2470_177_211	0.11	1.19	1253992leutSlputative carboxysome structural proteinl-
STM2472_2177_2211	0.00	-3.24	1253994lmaeBlmalic enzymel-
STM2473_321_355	0.04	1.57	1253995ltalAltransaldolase Al+
STM2474_1642_1676	0.14	-1.22	1253996ltktBltransketolasel+
STM2475_161_195	0.01	1.98	1253997lSTM2475lputative cytoplasmic proteinl-
STM2476_557_591	0.13	2.04	1253998lypfGlputative periplasmic proteinl-
STM2477_257_291	0.56	1.12	1253999lyffHlputative pyrophosphohydrolasel-
STM2478_588_622	0.09	-1.26	1254000lSTM2478lhypothetical proteinl+
STM2479_1379_1413	0.08	1.88	1254001laegAlputative oxidoreductase Fe-S binding subunitl-
STM2480_846_880	0.14	-1.52	1254002lnarQlnitrate/nitrite sensor protein NarQl+
STM2481_2307_2341	0.03	-1.49	1254003lacrDlaminoglycoside/multidrug efflux systeml+
STM2482_241_275	0.50	1.03	1254004lyffBlhypothetical proteinl+
STM2483_721_755	0.06	-1.41	1254005ldapElsuccinyl-diaminopimelate desuccinylasel+
STM2484_41_76	0.05	-1.48	1254006lSTM2484lputative inner membrane proteinl+
STM2485_1256_1290	0.04	-1.24	1254007lypfllputative acetyltransferasel-
STM2486_529_563	0.12	1.28	1254008lSTM2486lputative inner membrane proteinl-
STM2487_65_99	0.02	-4.24	1254009lpurClphosphoribosylaminoimidazole-succinocarboxamide synthasel-
STM2488_692_726	0.24	-1.12	1254010lnlpBllipoproteinl-
STM2489_257_291	0.66	-1.02	1254011ldapAldihydrodipicolinate synthasel-
STM2490_161_195	0.04	-1.21	1254012lgcvRlglycine cleavage system transcriptional repressorl+
STM2491_21_55	0.03	1.80	1254013lbcplthioredoxin-dependent thiol peroxidasel+
STM2492_161_195	0.00	-1.46	1254014lSTM2492lputative glycerate kinasel-
STM2493_997_1031	0.01	-1.51	1254015lperMlputative permeasel-
STM2494_849_883	0.21	1.28	1254016lSTM2494lhypothetical proteinl+
STM2495_249_283	0.62	-1.08	1254017lyfgDlputative arsenate reductasel+
STM2496_257_291	0.63	-1.05	1254018lyfgElDNA replication initiation factorl-
STM2497_803_837	0.95	-1.01	1254019luraAluracil transporterl-
STM2498_65_99	0.01	1.71	1254020luppluracil phosphoribosyltransferasel-
STM2499.S_790_824	0.00	-4.88	1254021lpurMlphosphoribosylaminoimidazole synthetasel+
STM2500_481_515	0.01	-2.41	1254022lpurNlphosphoribosylglycinamide formyltransferasel+
STM2501_1132_1166	0.04	1.39	1254023lppklpolyphosphate kinasel+
STM2502_607_641	0.54	-1.05	1254024lppxlexopolyphosphatasel+
STM2506_34_68	0.01	2.03	1254028lSTM2506lputative inner membrane proteinl+
STM2508_257_291	0.05	1.21	1254030lSTM2508lputative cytoplasmic proteinl+
STM2509_25_59	0.01	1.95	1254031lSTM2509lputative transposasel-

STM2510_1379_1413	0.17	-1.36	1254032IguAlbifunctional GMP synthase/glutamine amidotransferase proteinl-
STM2511_1236_1270	0.05	-4.01	1254033IguBlinositol-5-monophosphate dehydrogenasel-
STM2512_959_993	0.04	2.21	1254034IxseAlexodeoxyribonuclease VII large subunitl+
STM2513_5569_5603	0.08	-1.23	1254035IshdAlAIDA autotransporter-like proteinl-
STM2514_6885_6919	0.51	-1.20	1254036IratBlputative outer membrane proteinl-
STM2515_4983_5017	0.10	1.23	1254037IratAlputative outer membrane proteinl-
STM2518_65_99	0.09	1.23	1254040LyfgJlputative cytoplasmic proteinl-
STM2519_1306_1340	0.93	-1.02	1254041IengAlGTP-binding protein EngAl-
STM2520_780_814	0.06	-1.63	1254042LyfgLlouter membrane protein assembly complex subunit YfgLl-
STM2521_553_587	0.90	-1.02	1254043LyfgMlputative inner membrane proteinl-
STM2522_404_438	0.21	-1.23	1254044IhisSlhistidyl-tRNA synthetasel-
STM2523_120_154	0.81	-1.05	1254045IispGl4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthasel-
STM2524_934_968	0.07	-1.25	1254046LyfgAlhypothetical proteinl-
STM2525_1096_1130	0.03	-2.09	1254047LyfgBlhypothetical proteinl-
STM2526_321_355	0.00	-7.48	1254048IndkInucleoside diphosphate kinasel-
STM2527_177_211	0.83	-1.03	1254049ISTM2527lputative polyferredoxinl-
STM2528_577_611	0.03	-1.44	1254050ISTM2528lputative dimethylsulfoxide reductasel-
STM2529_489_523	0.03	1.32	1254051ISTM2529lputative anaerobic dimethylsulfoxide reductasel-
STM2530_2079_2113	0.11	-1.21	1254052ISTM2530lputative anaerobic dimethylsulfoxide reductasel-
STM2531_1445_1479	0.02	-1.62	1254053IpfpClpenicillin-binding protein 1Cl-
STM2532_4096_4130	0.00	-2.75	1254054ISTM2532lputative inner membrane lipoproteinl-
STM2533_609_643	0.17	-1.46	1254055IsseAl3-mercaptopyruvate sulfurtransferasel+
STM2534_513_547	0.05	2.77	1254056ISTM2534lputative cytoplasmic proteinl+
STM2535_385_419	0.38	-1.22	1254057IsseBlenhanced serine sensitivity proteinl-
STM2536_301_335	0.71	-1.05	1254058IpepBlaminopeptidase Bl-
STM2537_65_99	0.03	3.31	1254059LyfhJlhypothetical proteinl-
STM2538_297_331	0.04	4.09	1254060Ifdxlelectron carrier proteinl-
STM2539_1060_1094	0.03	3.82	1254061IhscAlchaperone protein HscAl-
STM2540_273_307	0.04	4.00	1254062IhscBlco-chaperone HscBl-
STM2541_169_203	0.04	3.10	1254063IscAliron-sulfur cluster assembly proteinl-
STM2542_57_91	0.02	7.57	1254064InifUscaffold proteinl-
STM2543_1112_1146	0.04	4.25	1254065InifSlcysteine desulfurasel-
STM2544_17_51	0.01	5.74	1254066LyfhPIDNA-binding transcriptional repressorl-
STM2545_385_419	0.06	1.55	1254067ISTM2545lputative rRNA methylasel-
STM2546_673_707	0.04	-1.63	1254068IsuhBlinositol monophosphatasel+
STM2547_385_419	0.10	1.15	1254069ISTM2547lputative hydrolasel+

STM2548_717_751	0.02	1.70	1254070lasrAlanaerobic sulfide reductasel+
STM2549_577_611	0.47	1.12	1254071lasrBlanaerobic sulfite reductase subunit Bl+
STM2550_271_305	0.06	1.41	1254072lasrClanaerobic sulfide reductasel+
STM2551_689_723	0.06	-1.57	1254073lPUTATIVE inner membrane proteinl-
STM2552_353_387	0.49	-1.08	1254074lPUTATIVE hypothetical proteinl-
STM2553_855_889	0.00	-4.52	1254075lCSIElstationary phase inducible protein CsiEl+
STM2554_157_191	0.02	-1.35	1254076lhcaTlPUTATIVE 3-phenylpropionic acid transporterl-
STM2555_1063_1097	0.02	-1.67	1254077lglyAldserine hydroxymethyltransferasel-
STM2556_264_298	0.00	-3.03	1254078lhmpAlnitric oxide dioxygenasel+
STM2557_1458_1492	0.17	1.36	1254079lcadCIDNA-binding transcriptional activatorl+
STM2558_1117_1151	0.92	1.01	1254080lcadBlpredicted lysine/cadaverine transporterl+
STM2559_1498_1532	0.00	2.84	1254081lcadAllysine decarboxylase 1l+
STM2561_209_243	0.67	-1.09	1254083lglnBlregulatory protein P-III-
STM2562_467_501	0.36	-1.14	1254084lyfhAlPUTATIVE transcriptional regulatorl-
STM2563_689_723	0.91	-1.03	1254085lyfhGlhypothetical proteinl-
STM2564_1196_1230	0.01	1.30	1254086lyfhKlPUTATIVE sensor kinasel-
STM2566_97_131	0.03	1.73	1254088lPUTATIVE periplasmic proteinl+
STM2567_802_836	0.01	1.57	1254089lyfhDlpredictive transglycosylasel+
STM2568_257_291	0.50	-1.08	1254090lyfhCltRNA-specific adenosine deaminasel-
STM2569_289_323	0.03	1.59	1254091lyfhBlhypothetical proteinl-
STM2570_877_911	0.02	1.51	1254092lPUTATIVE phosphotransferase system IIB componentl-
STM2571_17_51	0.12	-1.23	1254093lmurQIN-acetyl muramic acid-6-phosphate etherasel-
STM2572_225_259	0.02	1.80	1254094lyfhHlpredictive DNA-binding transcriptional regulatorl+
STM2573_577_611	0.11	-1.25	1254095lPUTATIVE 2-dehydropanoate 2-reductasel-
STM2574_582_616	0.14	1.32	1254096lPUTATIVE permeasel-
STM2575_641_675	0.37	1.07	1254097lPUTATIVE transcriptional regulatorl+
STM2576_97_131	0.01	-1.74	1254098lyfhLlpredictive ferredoxinl+
STM2577_17_51	0.70	1.07	1254099lACP54'-phosphopantetheinyl transferasel-
STM2578_385_419	0.36	1.16	1254100lpdxJlpyridoxal phosphate biosynthetic protein PdxJl-
STM2579_521_555	0.13	1.07	1254101lrecOIdNA repair protein RecOl-
STM2580_17_51	0.24	-1.14	1254102lEralGTP-binding protein Eral-
STM2581_337_371	0.57	-1.07	1254103lrnclribonuclease III-
STM2582_545_579	0.01	1.34	1254104llepBllsignal peptidase II-
STM2583_1249_1283	0.27	-1.17	1254105llepAIGTP-binding protein LepAII-
STM2584_1339_1374	0.01	2.66	1254106lgogBleucine-rich repeat proteinl+
STM2585_489_523	0.01	5.76	1254107lPUTATIVE transposase-like proteinl+

STM2585A_148_183	0.00	3.72	1254108 STM2585A PagK-like proteinl+
STM2586_436_471	0.07	2.39	1254109 STM2586 phage tail assembly-like proteinl-
STM2587_105_139	0.08	1.59	1254110 STM2587 phage tail assembly-like proteinl-
STM2589_2890_2924	0.04	1.41	1254112 STM2589 host specificity protein J-like l-
STM2590_177_211	0.06	1.69	1254113 STM2590 tail assembly protein I-like l-
STM2591_293_327	0.10	1.42	1254114 STM2591 tail assembly protein K-like l-
STM2592_385_419	0.05	1.78	1254115 STM2592 phage tail component L-like proteinl-
STM2593_113_147	0.06	1.52	1254116 STM2593 phage tail component M-like proteinl-
STM2594_2615_2649	0.09	1.79	1254117 STM2594 phage tail component H-like proteinl-
STM2595_161_195	0.02	2.87	1254118 STM2595 minor tail-like proteinl-
STM2596_92_126	0.26	1.55	1254119 STM2596 minor tail-like proteinl-
STM2597_375_409	0.02	2.37	1254120 STM2597 major tail-like proteinl-
STM2598_129_163	0.02	2.37	1254121 STM2598 hypothetical proteinl-
STM2599_612_646	0.03	1.85	1254122 STM2599 putative virulence proteinl+
STM2600_321_355	0.02	2.39	1254123 STM2600 minor tail protein Z-like l-
STM2601_220_254	0.02	2.21	1254124 STM2601 minor capsid protein FIII-l-
STM2602_193_227	0.05	2.21	1254125 STM2602 DNA packaging-like proteinl-
STM2603_606_640	0.03	2.39	1254126 STM2603 phage head-like proteinl-
STM2604_7_41	0.07	1.82	1254127 STM2604 phage head-like proteinl-
STM2605_674_708	0.27	1.47	1254128 STM2605 head-tail preconnector-like proteinl-
STM2606_1446_1480	0.05	1.82	1254129 STM2606 head-tail preconnector-like proteinl-
STM2607_81_115	0.01	1.55	1254130 STM2607 head-to-tail joining-like proteinl-
STM2608_1749_1783	0.05	2.01	1254131 STM2608 terminase-like large proteinl-
STM2610_201_235	0.54	1.12	1254133 STM2610 hypothetical proteinl+
STM2611.S_78_113	0.02	2.01	1254134 STM2611.S endopeptidase-like proteinl-
STM2612_357_391	0.16	1.35	1254135 STM2612 morphogenesis-like proteinl-
STM2613_88_122	0.02	2.82	1254136 STM2613 hypothetical proteinl-
STM2614_99_133	0.08	1.30	1254137 STM2614 hypothetical proteinl+
STM2615_25_59	0.01	2.47	1254138 STM2615 tRNAI-
STM2616_441_475	0.33	-1.15	1254139 STM2616 antirepressor-like proteinl-
STM2617_289_323	0.07	1.79	1254140 STM2617 antiterminator-like proteinl-
STM2618_73_107	0.11	1.61	1254141 STM2618 hypothetical proteinl-
STM2619_439_473	0.03	2.61	1254142 STM2619 hypothetical proteinl-
STM2620_532_566	0.69	1.07	1254143 STM2620 hypothetical proteinl-
STM2622_56_95	0.04	1.43	1254145 STM2622 hypothetical proteinl-
STM2629_148_183	0.02	2.00	1254152 STM2629 hypothetical proteinl+

STM2630_108_142	0.12	1.30	1254153lSTM2630lhypothetical proteinl+
STM2631_180_214	0.03	1.26	1254154lSTM2631lhypothetical proteinl+
STM2635_81_115	0.05	1.86	1254158lSTM2635lexcisionase-like proteinl+
STM2636_1031_1065	0.40	-1.03	1254159lSTM2636lintegrase-like proteinl-
STM2637_121_155	0.01	2.36	1254160lrseCISoxR reducing system protein RseCl-
STM2638_769_803	0.55	1.06	1254161lrseBiperiplasmic negative regulator of sigmaEl-
STM2639_193_227	0.08	1.28	1254162lrseAlanti-RNA polymerase sigma factor SigEl-
STM2640_417_451	0.05	1.24	1254163lrpoEIRNA polymerase sigma factor RpoEl-
STM2641_912_946	0.78	-1.06	1254164lnadBIL-aspartate oxidasel+
STM2642_449_483	0.07	-1.37	1254165lyfiClputative transferasel-
STM2643_504_538	0.02	-1.47	1254166lsrmBlATP-dependent RNA helicase SrmBl+
STM2644_529_563	0.00	2.10	1254167lyfiElputative transcriptional regulatorl-
STM2645_97_131	0.17	-1.58	1254168lyfiKneutral amino-acid efflux proteinl+
STM2647_353_387	0.45	1.09	1254170lungluracil-DNA glycosylasel+
STM2648_839_873	0.86	-1.02	1254171lyfiFlpredicted methyltransferasel-
STM2649_129_163	0.03	1.53	1254172ltrxCltioredoxin 2l+
STM2650_529_563	0.00	-1.62	1254173lyfiPlputative cytoplasmic proteinl+
STM2651_2494_2528	0.05	-1.57	1254174lyfiQlputative acetyl-CoA synthetasel+
STM2652_421_455	0.00	-2.25	1254175lpssAlphosphatidylserine synthasel+
STM2653_101_135	0.00	-1.66	1254176lyfiMlhypothetical proteinl+
STM2654_815_849	0.02	-1.64	1254177lkgtPlalpha-ketoglutarate transporterl-
STM2655_401_435	0.16	1.58	1254178lSTM2655lputative cytoplasmic proteinl-
STM2660_1719_1753	0.05	1.65	1254183lcldBprotein disaggregation chaperonel-
STM2661_251_285	0.02	1.66	1254184lyfiHlhypothetical proteinl-
STM2662_129_163	0.73	1.08	1254185lrluDl23S rRNA pseudouridine synthase Dl-
STM2663_465_499	0.90	1.01	1254186lyfiOlpredicted lipoproteinl+
STM2664_45_79	0.04	3.08	1254187lSTM2664lpseudol+
STM2665_33_67	0.01	-1.78	1254188lyfiAltranslation inhibitor protein RaiAl+
STM2667_482_516	0.01	1.14	1254190lpheAlbifunctional chorismate mutase/prephenate dehydratasel+
STM2669_507_541	0.86	-1.10	1254192ltyrAlbifunctional chorismate mutase/prephenate dehydrogenasel-
STM2670_968_1002	0.61	-1.36	1254193laroFphospho-2-dehydro-3-deoxyheptonate aldolasel-
STM2671_97_131	0.04	-1.44	1254194lyfiRlputative periplasmic proteinl+
STM2672_926_960	0.06	1.23	1254195lyfiNlputative diguanylate cyclase/phosphodiesterasel+
STM2673_289_323	0.02	-2.03	1254196lrpISI50S ribosomal protein L19l-
STM2674_385_419	0.02	-2.95	1254197ltrmDltRNA (guanine-N(1)-) -methyltransferasel-
STM2675_353_387	0.02	-2.62	1254198lrimMI16S rRNA-processing proteinl-

STM2676_49_83	0.02	-1.42	1254199 rpssP 30S ribosomal protein S16l-
STM2677_971_1005	0.09	1.32	1254200 ffh signal recognition particle proteinl-
STM2678_561_595	0.34	-1.27	1254201 corEl hypothetical proteinl+
STM2679_454_488	0.31	1.40	1254202 yfjD hypothetical proteinl+
STM2680_177_211	0.01	1.33	1254203 STM2680 putative cytoplasmic proteinl+
STM2681_257_291	0.49	1.26	1254204 grpEl heat shock protein GrpEl-
STM2682_7_41	0.03	1.94	2673728 STM2682 I-I-
STM2683_641_675	0.02	1.91	1254206 ppnK inorganic polyphosphate/ATP-NAD kinase l+
STM2684_1159_1193	0.03	2.10	1254207 recNl recombination and repair proteinl+
STM2685_169_203	0.06	1.32	1254208 smpA hypothetical proteinl+
STM2686_216_251	0.02	1.62	1254209 yfjF hypothetical proteinl-
STM2687_193_227	0.01	2.42	1254210 yfjG hypothetical proteinl-
STM2688_305_339	0.01	1.68	1254211 smpB SsrA-binding proteinl+
STM2689_7512_7546	0.02	-3.37	1254212 STM2689 pseudol+
STM2690_1371_1405	0.04	-2.76	1254213 STM2690 putative outer membrane efflux proteinl+
STM2691_1346_1380	0.07	-1.67	1254214 STM2691 putative ABC transporter transmembrane regionl+
STM2694_181_215	0.01	2.11	1254217 STM2694 late control-like proteinl-
STM2695_934_968	0.36	1.19	1254218 STM2695 late control-like proteinl-
STM2696_25_59	0.46	1.05	1254219 STM2696 putative phage tail proteinl-
STM2697_2577_2611	0.68	1.08	1254220 STM2697 phage tail-like proteinl-
STM2698_33_67	0.67	1.22	1254221 STM2698 gpE-like proteinl-
STM2700_417_451	0.23	1.11	1254223 STM2700 phage tail fiber-like proteinl-
STM2702_205_239	0.24	1.19	1254225 STM2702 DNA invertase-like proteinl-
STM2705_369_403	0.80	-1.03	1254228 STM2705 hypothetical proteinl-
STM2707_417_451	0.82	-1.05	1254230 STM2707 phage tail-like proteinl-
STM2711_182_216	0.23	-1.31	1254234 STM2711 phage tail-like proteinl-
STM2712_113_147	0.07	-1.64	1254235 STM2712 phage tail-like proteinl-
STM2713_193_227	0.86	1.03	1254236 STM2713 hypothetical proteinl-
STM2714_153_187	0.20	1.44	1254237 STM2714 lysis-like proteinl-
STM2715.S_27_61	0.48	1.21	1254238 STM2715.S probable prophage lysozymel-
STM2717_67_101	0.00	-1.41	1254240 STM2717 phage tail-like proteinl-
STM2718_161_195	0.04	-1.28	1254241 STM2718 head completion-like proteinl-
STM2719_457_491	0.07	1.91	1254242 STM2719 terminase-like proteinl-
STM2720_532_566	0.17	1.41	1254243 STM2720 major capsid-like proteinl-
STM2722_1472_1506	0.01	2.12	1254245 STM2722 terminase-like proteinl+
STM2725_47_81	0.03	-1.57	1254248 STM2725 pseudol-

STM2726_241_275	0.07	-1.54	1254249 STM2726 hypothetical protein -
STM2728_105_139	0.07	-1.61	1254251 STM2728 hypothetical protein -
STM2729_2367_2401	0.16	-1.26	1254252 STM2729 hypothetical protein -
STM2730_513_547	0.48	-1.05	1254253 STM2730 DNA adenine methylase-like protein -
STM2732_133_167	0.01	-1.66	1254255 STM2732 hypothetical protein -
STM2734_145_179	0.58	-1.08	1254257 STM2734 hypothetical protein +
STM2737_153_187	0.25	-1.27	1254260 STM2737 hypothetical protein -
STM2738_33_67	0.24	-1.37	1254261 STM2738 hypothetical protein +
STM2740_226_260	0.00	-3.52	1254263 STM2740 integrase-like protein +
STM2740.1N_37_71	0.00	-18.32	2673740 STM2740.1N hypothetical protein +
STM2741_465_499	0.00	-5.60	1254264 STM2741 putative periplasmic protein +
STM2742_675_709	0.03	-1.30	1254265 STM2742 putative cytoplasmic protein +
STM2743_57_91	0.02	1.55	1254266 STM2743 putative cytoplasmic protein -
STM2745_1515_1549	0.15	-1.29	1254268 STM2745 putative inner membrane protein +
STM2746_794_830	0.34	1.18	1254269 STM2746 putative ATPasel +
STM2747_637_674	0.02	2.17	1254270 STM2747 putative cytoplasmic protein +
STM2748_193_227	0.51	1.16	1254271 STM2748 putative transcriptional regulator -
STM2749_97_131	0.05	1.15	1254272 STM2749 putative cytoplasmic protein +
STM2750_443_477	0.50	1.11	1254273 STM2750 putative PTS system glucitol/sorbitol-specific enzyme III +
STM2751_97_131	0.84	-1.03	1254274 STM2751 putative glucitol-specific PTS enzyme III +
STM2752_97_131	0.27	-1.18	1254275 STM2752 putative glucitol-specific PTS enzyme III +
STM2753_751_785	0.94	1.01	1254276 STM2753 putative dehydrogenasel +
STM2754_686_720	0.02	2.41	1254277 STM2754 putative hexulose 6 phosphate synthasel +
STM2755_161_195	0.23	-1.21	1254278 STM2755 putative hexulose 6 phosphate synthasel -
STM2756_497_531	0.02	1.54	1254279 STM2756 putative sugar phosphate aminotransferasel -
STM2759_1417_1451	0.03	-1.91	1254282 STM2759 putative dipeptide/oligopeptide/nickel ABC-type transport system periplasmic component +
STM2760_353_387	0.02	1.29	1254283 STM2760 putative integrasel +
STM2761_1252_1286	0.05	1.30	1254284 STM2761 putative inner membrane protein +
STM2762_685_723	0.01	2.41	1254285 STM2762 putative inner membrane protein -
STM2763_417_451	0.02	1.63	2673753 STM2763 I-I
STM2764_239_274	0.01	1.57	2673748 STM2764 I-I
STM2766_89_127	0.05	1.58	1254289 STM2766 putative cytoplasmic protein -
STM2767_1688_1722	0.12	1.48	1254290 STM2767 putative DNA/RNA helicasel -
STM2768_195_229	0.02	1.59	1254291 STM2768 putative transposasel +
STM2769_435_469	0.75	-1.08	1254292 STM2769 putative transposasel +

STM2770_49_83	0.03	1.55	1254293lflyAlphase-1 flagellin repressorl-
STM2771_1354_1388	0.58	-1.08	1254294lflyBflagellinl-
STM2772_221_257	0.28	-1.16	1254295lhinlDNA-invertase Hinl+
STM2773_341_375	0.23	-1.13	1254296liroBputative glycosyl transferasel+
STM2774_2943_2977	0.94	1.02	1254297liroCputative ABC transporter proteinl+
STM2775_630_664	0.02	-1.72	1254298liroDlenterochelin esterase--like proteinl+
STM2776_321_355	0.25	1.21	1254299liroEputative hydrolasel+
STM2777_2014_2048	0.20	1.46	1254300liroNTonB-dependent siderophore receptor proteinl-
STM2778_39_73	0.35	1.17	1254301lSTM2778lpseudol+
STM2780_470_504	0.00	2.33	1254303lpipB2lsecreted effector proteinl-
STM2781_561_595	0.01	4.13	1254304lvirKvirulence proteinl+
STM2782_729_763	0.03	2.23	1254305lmig-14lputative transcriptional activatorl+
STM2783_175_209	0.04	-1.59	1254306lnixAlputative nickel transporterl-
STM2784_609_643	0.00	-2.54	1254307ltctElregulatory proteinl-
STM2785_465_499	0.01	-2.66	1254308ltctDlregulatory proteinl-
STM2786_113_147	0.00	-3.64	1254309lSTM2786ltricarboxylic transportl+
STM2787_3_37	0.00	-6.24	1254310lSTM2787ltricarboxylic transportl+
STM2788_1124_1158	0.01	-2.19	1254311lSTM2788ltricarboxylic transportl+
STM2789_713_747	0.01	-5.05	1254312lSTM2789lhypothetical proteinl+
STM2790_494_528	0.00	-5.64	1254313lygaFlhypothetical proteinl+
STM2791_866_900	0.01	-2.12	1254314lgabDlsuccinate-semialdehyde dehydrogenase II+
STM2792_765_799	0.00	-7.17	1254315lgabTl4-aminobutyrate aminotransferasel+
STM2793_786_820	0.04	-1.52	1254316lgabPlgamma-aminobutyrate transporterl+
STM2794_505_539	0.00	-2.81	1254317lygaEIDNA-binding transcriptional regulator CsiRI+
STM2795_233_267	0.28	1.18	1254318lygaUlhypothetical proteinl-
STM2796_63_97	0.17	1.53	1254319lyqaElputative transport proteinl-
STM2797_191_225	0.50	1.05	1254320lSTM2797lputative regulatory proteinl+
STM2798_75_109	0.23	-1.15	1254321lygaPlputative rhodanese-like sulfurtransferasel+
STM2799_49_83	0.02	1.77	1254322lstpAIDNA binding protein nucleoid-associatedl-
STM2801_241_275	0.02	2.03	1254324lygaChypothetical proteinl-
STM2802_17_52	0.05	1.35	1254325lygaMlhypothetical proteinl+
STM2803_544_578	0.76	-1.04	1254326lSTM2803lputative regulatory proteinl-
STM2804.1n_27_61	0.02	1.40	2673735lSTM2804.1nlhypothetical proteinl+
STM2806_97_131	0.49	-1.31	1254329lnrdllribonucleotide reductase stimulatory proteinl+
STM2807_1338_1372	0.16	-1.54	1254330lnrdElribonucleotide-diphosphate reductase subunit alphal+
STM2808_721_755	0.35	-1.18	1254331lnrdFlribonucleotide-diphosphate reductase subunit betal+

STM2809_940_974	0.62	1.07	1254332lproVlglycine betaine transporter ATP-binding subunit+
STM2810_162_196	0.39	1.11	1254333lproWlglycine betaine transporter membrane proteinl+
STM2811_641_675	0.17	1.36	1254334lproXlglycine betaine transporter periplasmic subunitl+
STM2812_890_924	0.01	-2.41	1254335lSTM2812lputative inner membrane proteinl+
STM2813_81_115	0.04	-1.38	1254336llemrRltranscriptional repressor MprAl+
STM2814_430_464	0.04	1.30	1254337llemrAlmultidrug resistance secretion proteinl+
STM2815_828_862	0.16	-1.18	1254338llemrBlputative multidrug transport proteinl+
STM2816_372_406	0.02	1.44	1254339lSTM2816lputative glycoporinl-
STM2817_9_43	0.15	1.15	1254340lluxSIS-ribosylhomocysteinase l-
STM2818_846_880	0.09	-1.30	1254341lgshAglglutamate--cysteine ligasel-
STM2819_257_291	0.05	-1.52	1254342lyqaAlputative inner membrane proteinl-
STM2820_161_195	0.00	1.96	1254343lyqaBlpredicted hydrolasel-
STM2821/STM2822/STM282	0.11	-1.52	1254344/1254345/1254346/1254347lSTM2821/STM2822/STM2823/STM2824ltRNAl-
STM2826_9_43	0.47	1.06	1254349lcsrAlcarbon storage regulatorl-
STM2827_2032_2066	0.03	-1.74	1254350lalaSlalanyl-tRNA synthetasel-
STM2828_29_63	0.08	1.81	1254351lrecXlrecombination regulator RecXI-
STM2829_799_833	0.12	1.56	1254352lrecAlrecombinase Al-
STM2830_139_173	0.25	-1.13	1254353lygaDlcompetence damage-inducible protein Al-
STM2831_225_259	0.09	-1.36	1254354lmltBlmembrane-bound lytic murein transglycosylase B; catalyzes the cleavage of the glycosidic bonds between N-acetylmuramic acid and N-acetylglucosamine in peptidoglycanl-
STM2832_257_291	0.26	-1.24	1254355lsrlAlgglucitol/sorbitol-specific enzyme IIC componentl+
STM2833_263_297	0.06	2.19	1254356lsrlElglucitol/sorbitol-specific enzyme IIB componentl+
STM2834_169_203	0.04	1.71	1254357lsrlBglglucitol/sorbitol-specific PTS system component IIAl+
STM2835_705_739	0.31	1.11	1254358lsrlDsorbitol-6-phosphate dehydrogenasel+
STM2836_305_339	0.02	1.45	1254359lgutMIDNA-binding transcriptional activator of glucitol operonl+
STM2837_545_579	0.15	-1.18	1254360lsrlRIDNA-bindng transcriptional repressorl+
STM2838.S_401_435	0.04	-1.48	1254361lgutQlD-arabinose 5-phosphate isomerasel+
STM2839_810_844	0.44	-1.10	1254362lygaAlanaerobic nitric oxide reductase transcription regulatorl-
STM2840_1105_1139	0.37	1.07	1254363lSTM2840lanaerobic nitric oxide reductase flavorubredoxinl+
STM2841_663_697	0.07	-1.36	1254364lygbDlnitric oxide reductasel+
STM2842_1250_1284	0.28	1.18	1254365lhypFlhydrogenase maturation proteinl-
STM2843_257_291	0.67	1.07	1254366hydNlelectron transport protein HydNl-
STM2844_545_579	0.01	1.12	1254367lSTM2844lhypothetical proteinl-
STM2845_265_299	0.06	1.15	1254368lhyclhydrogenase 3 maturation proteasel-

STM2846_81_115	0.02	1.28	1254369lhycHlhydrogenase 3 large subunit processing proteinl-
STM2848_209_243	0.03	1.48	1254371lhycFlformate hydrogenlyase complex iron-sulfur subunitl-
STM2849_967_1001	0.59	-1.06	1254372lhycElhydrogenase 3 large subunitl-
STM2850_257_291	0.20	1.36	1254373lhycDlhydrogenase 3 membrane subunitl-
STM2851_1532_1566	0.99	1.00	1254374lhycClformate hydrogenlyase subunit 3l-
STM2853_385_419	0.88	1.01	1254376lhycAltranscriptional repressorl-
STM2854_145_179	0.04	1.39	1254377lhypAlhydrogenase nickel incorporation proteinl+
STM2855_209_243	0.13	1.24	1254378lhypBlhydrogenase nickel incorporation protein HypBl+
STM2856_73_107	0.13	-1.09	1254379lhypChydrogenase isoenzymes formation proteinl+
STM2857_152_186	0.03	1.39	1254380lhypDlputative hydrogenase formation proteinl+
STM2858_716_750	0.06	-1.17	1254381lhypElputative hydrogenase formation proteinl+
STM2859_1848_1882	0.18	-1.18	1254382lfhlAlformate hydrogen-lyase transcriptional activatorl+
STM2860_187_221	0.01	1.62	1254383lygbAlhypothetical proteinl-
STM2861_441_475	0.91	1.02	1254384lsitAlputative periplasmic binding proteinl+
STM2862_257_291	0.02	1.58	1254385lsitBlputative ATP-binding proteinl+
STM2863_129_163	0.67	1.09	1254386lsitClputative permeasel+
STM2864_513_547	0.99	-1.00	1254387lsitDlputative permeasel+
STM2865_113_147	0.02	2.16	1254388lavrAlsecreted effector proteinl-
STM2866_705_739	0.03	1.44	1254389lsprBltranscriptional regulatorl-
STM2868_115_149	0.18	-1.35	1254391lorgClputative cytoplasmic proteinl-
STM2869_545_579	0.32	-1.17	1254392lorgBlneedle complex export proteinl-
STM2871_33_67	0.45	1.07	1254394lprgKlneedle complex inner membrane lipoproteinl-
STM2873_129_163	0.01	-1.54	1254396lprgIlneedle complex major subunitl-
STM2874_308_342	0.03	2.67	1254397lprgHlneedle complex inner membrane proteinl-
STM2875_577_611	0.02	1.60	1254398lhilDlinvasion protein regulatory proteinl+
STM2876_1455_1489	0.02	2.93	1254399lhilAlinvasion protein regulatorl+
STM2877_145_179	0.08	2.03	1254400liagBlinvasion protein precursorl+
STM2878_1337_1371	0.13	1.31	1254401lsptPlprotein tyrosine phosphatase/GTPase activating proteinl-
STM2879_253_287	0.17	1.28	1254402lsicPlsecretion chaperonel-
STM2881_81_115	0.02	1.51	1254404liacPlacyl carrier proteinl-
STM2882_1699_1733	0.31	1.15	1254405lsipAlsecreted effector proteinl-
STM2883_425_459	0.01	2.20	1254406lsipDltranslocation machinery componentl-
STM2884_423_457	0.12	-1.18	1254407lsipCltanslocation machinery componentl-
STM2885_927_961	0.01	-1.42	1254408lsipBltranslocation machinery componentl-
STM2886_409_443	0.07	1.82	1254409lsicAlsecretion chaperonel-
STM2887_936_970	0.14	1.13	1254410lspaSlsurface presentation of antigens protein SpaSl-

STM2888_481_515	0.41	-1.11	1254411lspaRlneedle complex export proteinl-
STM2889_193_227	0.90	1.02	1254412lspaQlneedle complex export proteinl-
STM2890_422_459	0.34	1.45	1254413lspaPlsurface presentation of antigens protein SpaPl-
STM2891_769_803	0.57	-1.15	1254414lspaOlsurface presentation of antigens protein SpaOl-
STM2892_876_910	0.65	-1.04	1254415linvJlneedle length control proteinl-
STM2895_9_43	0.98	1.00	1254418linvBlsecretion chaperonel-
STM2896_1795_1829	0.95	1.01	1254419linvAlneedle complex export proteinl-
STM2897_376_410	0.19	1.13	1254420linvElinvasion proteinl-
STM2898_1346_1380	0.20	-1.26	1254421linvGlouter membrane secretin precursorl-
STM2899_513_547	0.36	1.22	1254422linvFlinvasion regulatory proteinl-
STM2900_114_148	0.03	2.30	1254423linvHlneedle complex outer membrane lipoprotein precursorl+
STM2901_321_355	0.63	-1.05	1254424lSTM2901lputative cytoplasmic proteinl+
STM2902_261_297	0.33	1.14	1254425lSTM2902lputative cytoplasmic proteinl+
STM2903_281_315	0.76	1.08	1254426lSTM2903lputative cytoplasmic proteinl-
STM2904_169_203	0.61	-1.06	1254427lSTM2904lputative ABC-type transporterl+
STM2905_145_179	0.34	1.17	1254428lSTM2905lputative acetyltransferasel+
STM2906_129_163	0.02	1.42	1254429lSTM2906l-I-
STM2907_401_435	0.18	1.22	1254430lpphBlsleine/threonine-specific protein phosphatase 2l+
STM2908_193_227	0.01	1.85	1254431lSTM2908lputative cytoplasmic proteinl-
STM2909_1697_1731	0.07	1.29	1254432lmutSIDNA mismatch repair proteinl+
STM2910_193_227	0.89	1.05	1254433lSTM2910lputative cytoplasmic proteinl-
STM2911_514_548	0.59	-1.27	1254434lSTM2911lputative permeasel-
STM2912_321_355	0.78	-1.03	1254435lSTM2912lputative transcriptional regulatorl+
STM2913_946_980	0.00	1.53	1254436lSTM2913lputative permeasel-
STM2915_705_739	0.37	-1.22	1254438lygbMlhypothetical proteinl-
STM2916_161_195	0.03	-1.65	1254439lygbLlputative aldolasel-
STM2917_360_394	0.03	-1.48	1254440lygbKlputative tRNA synthasel-
STM2918_193_227	0.07	-1.21	1254441lygbJl3-hydroxyisobutyrate dehydrogenasel-
STM2919_193_227	0.03	1.19	1254442lygbllputative regulatory proteinl+
STM2920_113_147	0.02	1.34	1254443lSTM2920lputative transcriptional regulatorl-
STM2921_65_99	0.17	-1.15	1254444lSTM2921lputative flavoproteinl+
STM2922_1197_1231	0.39	1.06	1254445lSTM2922lputative 3-polyprenyl-4-hydroxybenzoate decarboxylasel+
STM2923_81_115	0.03	2.38	1254446lSTM2923lputative cytoplasmic proteinl+
STM2924_257_291	0.00	-2.52	1254447lrpoSIRNA polymerase sigma factor RpoSl-
STM2925_327_361	0.36	-1.16	1254448lnlpDlpredicted outer membrane lipoproteinl-
STM2926_273_307	0.44	-1.10	1254449lpcmlprotein-L-isoaspartate O-methyltransferasel-

STM2927_481_515	0.03	-1.47	1254450lsurElstationary phase survival protein SurEl-
STM2928_643_677	0.00	-1.35	1254451ltruDltRNA pseudouridine synthase Dl-
STM2929_353_387	0.40	-1.19	1254452lispFl2-C-methyl-D-erythritol 2 4-cyclodiphosphate synthasel-
STM2930_513_547	0.93	-1.02	1254453lispDl2-C-methyl-D-erythritol 4-phosphate cytidylyltransferasel-
STM2931_49_83	0.01	-1.60	1254454lftsBlcell divisoin protein FtsBl-
STM2932_229_263	0.12	1.77	1254455lygbElhypothetical proteinl-
STM2933_161_195	0.43	-1.45	1254456lcysCladenylylsulfate kinasel-
STM2934_697_731	0.48	-1.39	1254457lcysNlsulfate adenylyltransferase subunit 1l-
STM2935_161_195	0.99	1.01	1254458lcysDlsulfate adenylyltransferase subunit 2l-
STM2936_336_370	0.51	1.13	1254459liplaminopeptidase in alkaline phosphatase isozyme conversionl+
STM2937_146_180	0.03	-1.22	1254460lygbFlhypothetical proteinl-
STM2938_769_803	0.05	-1.21	1254461lSTM2938lputative cytoplasmic proteinl-
STM2939_481_515	0.02	-1.55	1254462lygcHlputative cytoplasmic proteinl-
STM2940_513_547	0.08	-1.30	1254463lSTM2940lputative cytoplasmic proteinl-
STM2941_988_1022	0.01	-2.11	1254464lyghJlputative cytoplasmic proteinl-
STM2943_622_656	0.01	-2.18	1254466lSTM2943lputative cytoplasmic proteinl-
STM2944_1857_1891	0.00	-1.68	1254467lygcBlputative helicasel-
STM2945_713_747	0.04	1.64	1254468lsopDlsecreted effector proteinl+
STM2946_553_587	0.44	-1.22	1254469lcysHlphosphoadenosine phosphosulfate reductasel-
STM2947_1146_1180	0.39	-1.34	1254470lcysIlsulfite reductase alpha subunitl-
STM2948_1201_1235	0.39	-1.35	1254471lcysJlsulfite reductase subunit alphal-
STM2949_129_163	0.86	1.03	1254472lptpSlputative 6-pyruvoyl tetrahydrobiopterin synthasel+
STM2950_193_227	0.31	1.25	1254473lSTM2950lputative metal-dependent hydrolasel-
STM2951_129_163	0.01	2.11	1254474lygcFlhypothetical proteinl-
STM2952_684_718	0.07	1.41	1254475lenolphosphopyruvate hydratasel-
STM2953_895_929	0.02	2.07	1254476lpyrGICTP synthasel-
STM2954_609_643	0.01	1.44	1254477lmazGlnucleoside triphosphate pyrophosphohydrolasel-
STM2954.1n_217_254	0.01	2.45	2673739lSTM2954.1nhypothetical proteinl-
STM2955.S_77_111	0.01	1.44	1254478lSTM2955.Slputative transcriptional regulatorl-
STM2956_2176_2210	0.09	1.44	1254479lrelA/GDP/GTP pyrophosphokinasel-
STM2957_1225_1259	0.03	1.29	1254480lrumAl23S rRNA 5-methyluridine methyltransferasel-
STM2958_1790_1824	0.11	-1.16	1254481lbarAlhybrid sensory histidine kinase BarAl+
STM2959_800_834	0.04	1.22	1254482lSTM2959lputative glycerate kinase 2l-
STM2960_1190_1224	0.07	-1.50	1254483lgudDld-glucarate dehydratasel-
STM2961_374_408	0.46	1.26	1254484lygcYlputative D-glucarate dehydratasel-
STM2962_748_782	0.64	-1.10	1254485lgudTlputative D-glucarate permeasel-

STM2963_137_171	0.92	1.01	1254486 STM2963 flavodoxinl-
STM2964_513_547	0.02	-1.84	1254487 yqcB tRNA pseudouridine synthase Cl-
STM2965_169_203	0.02	-1.47	1254488 yqcC putative cytoplasmic proteinl-
STM2966_210_244	0.04	-2.45	1254489 csrB misc_RNA -
STM2967_417_451	0.15	-1.17	1254490 sydI SecY interacting protein SydI-
STM2968_785_819	0.59	1.07	1254491 queF17-cyano-7-deazaguanine reductasel+
STM2969_638_672	0.05	1.17	1254492 ygdH putative nucleotide bindingl+
STM2970_1187_1221	0.03	-2.09	1254493 sdaC putative serine transport proteinl+
STM2971_497_531	0.14	-1.43	1254494 sdaB L-serine dehydratase/L-threonine deaminase 2l+
STM2972_417_451	0.01	1.50	1254495 xnilexonuclease IX +
STM2973_182_216	0.24	-1.27	1254496 fucO L-2-propanediol oxidoreductasel-
STM2974_545_579	0.08	-1.35	1254497 fucA L-fuculose phosphate aldolasel-
STM2975_831_865	0.00	-2.39	1254498 fucP pseudol+
STM2977_708_742	0.09	-1.49	1254500 fucK L-fuculokinasel+
STM2978_137_171	0.00	-1.45	1254501 fucU putative L-fucose-binding proteinl+
STM2979_225_259	0.00	-7.83	1254502 fucR DNA-binding transcriptional activatorl+
STM2980_1014_1048	0.33	1.13	1254503 ygdE putative SAM-dependent methyltransferasel-
STM2981_345_379	0.37	1.07	1254504 ygdD hypothetical proteinl-
STM2982_833_867	0.08	1.80	1254505 gcvA DNA-binding transcriptional activator GcvAl-
STM2983_49_83	0.92	-1.01	1254506 ygdI putative lipoproteinl-
STM2984_741_775	0.32	1.07	1254507 csdA cysteine sulfinate desulfinasel+
STM2985_199_233	0.05	1.78	1254508 ygdK FeS center assembly proteinl+
STM2986.Sc_705_739	0.05	1.23	1254509 STM2986.Sc putative integral membrane proteinl+
STM2987_193_227	0.94	-1.01	1254510 ygdL putative enzymel-
STM2988_867_901	0.11	-1.37	1254511 mltA murein transglycosylase Al-
STM2991_1087_1121	0.11	1.57	1254514 amiC N-acetylmuramoyl-L-alanine amidasel-
STM2992_333_367	0.09	1.21	1254515 argA N-acetylglutamate synthasel+
STM2993_1581_1615	0.06	-1.66	1254516 RecD lexonuclease V subunit alphal-
STM2994_2739_2773	0.17	-1.19	1254517 RecB lexonuclease V subunit betal-
STM2995_2370_2404	0.43	1.07	1254518 ptrl protease III-
STM2996_3301_3335	0.16	1.28	1254519 recC lexonuclease V subunit gammal-
STM2997_65_99	0.83	-1.02	1254520 ppdC hypothetical proteinl-
STM2998_286_320	0.41	-1.06	1254521 ygdB hypothetical proteinl-
STM2999_321_355	0.04	2.31	1254522 ppdB hypothetical proteinl-
STM3000_17_51	0.07	1.37	1254523 ppdA hypothetical proteinl-
STM3001_321_355	0.05	-1.28	1254524 thyA thymidylate synthasel-

STM3002_593_627	0.21	-1.16	1254525 lgt prolipoprotein diacylglycerol transferasel-
STM3003_1344_1378	0.25	-1.14	1254526 ptsP fused phosphoenolpyruvate-protein phosphotransferase PtsP/GAF domainl-
STM3004_449_483	0.06	1.18	1254527 ygdP dinucleoside polyphosphate hydrolasel-
STM3004.1n_21_55	0.07	1.66	2673726 STM3004.1n hypothetical proteinl-
STM3005_233_267	0.12	1.44	1254528 mutH DNA mismatch repair proteinl+
STM3006_417_451	0.01	-1.23	1254529 ygdQ putative transport proteinl+
STM3007_57_91	0.00	-1.89	1254530 ygdR putative peptide transport proteinl+
STM3008_266_300	0.02	-2.30	1254531 tas putative aldo/keto reductasel+
STM3009_356_390	0.03	-1.36	1254532 ygeD hypothetical proteinl-
STM3010_2009_2043	0.03	-1.33	1254533 laasl bifunctional acyl-[acyl carrier protein] synthetase/2-acylglycerophosphoethanolamine acyltransferasel-
STM3011_318_352	0.37	-1.08	1254534 galR DNA-binding transcriptional repressorl+
STM3012_392_426	0.03	1.62	1254535 STM3012 putative transcriptional regulatorl+
STM3013_776_810	0.76	1.04	1254536 lysAldiaminopimelate decarboxylasel-
STM3014_193_227	0.02	1.43	1254537 lysR DNA-binding transcriptional regulator LysRl+
STM3015_353_387	0.05	-1.42	1254538 ygeA putative racemasel-
STM3016_1188_1222	0.80	1.04	1254539 araE L-arabinose/proton symport proteinl-
STM3017_193_227	0.63	1.03	1254540 kduD D-deoxy-D-gluconate 3-dehydrogenasel-
STM3019_692_726	0.01	-6.30	1254542 yqeF acetyl-CoA acetyltransferasel-
STM3020_337_371	0.29	1.13	1254543 STM3020 putative transcriptional regulatorl-
STM3021_321_355	0.17	1.09	1254544 STM3021 putative inner membrane proteinl+
STM3022_615_649	0.03	1.76	1254545 STM3022 putative transport proteinl+
STM3023_149_183	0.01	1.47	1254546 yohL putative cytoplasmic proteinl-
STM3024_449_483	0.11	-1.07	1254547 yohM nickel/cobalt efflux protein RcnAl+
STM3025_145_179	0.01	1.31	1254548 STM3025 putative cytoplasmic proteinl-
STM3025.1N_181_215	0.14	1.45	2673750 STM3025.1N hypothetical proteinl-
STM3026_174_209	0.05	-1.33	1254549 STM3026 putative outer membrane proteinl-
STM3028_1779_1813	0.03	-1.67	1254551 stdB putative outer membrane usher proteinl-
STM3031_473_507	0.00	3.41	1254554 STM3031 Ail/OmpX-like proteinl-
STM3033_225_259	0.01	1.45	1254556 STM3033 putative nucleic acid-binding proteinl-
STM3034_37_72	0.01	1.58	1254557 STM3034 putative cytoplasmic proteinl-
STM3036_257_291	0.01	-1.53	1254559 STM3036 putative inner membrane proteinl+
STM3037_2_36	0.55	-1.08	1254560 glyU tRNAI-
STM3038_101_135	0.12	1.66	1254561 STM3038 putative metalloendopeptidasel-
STM3039_305_339	0.01	1.52	1254562 lid isopentenyl-diphosphate delta-isomerasel+

STM3040_775_809	0.04	-1.70	1254563lysSlysyl-tRNA synthetasel-
STM3041c_638_672	0.53	-1.13	1254564lprfBlpeptide chain release factor 2l-
STM3042_1407_1441	0.92	1.01	1254565lrecJlsDNA exonuclease RecJl-
STM3043_553_587	0.04	1.37	1254566ldsCthiol:disulfide interchange protein DsbCl-
STM3044_321_355	0.15	-1.30	1254567lxerDlsite-specific tyrosine recombinase XerDi-
STM3045_361_395	0.92	-1.03	1254568lfldBflflavodoxin FldBl+
STM3046_193_227	0.02	-1.40	1254569lygfXlputative inner membrane proteinl-
STM3047_169_203	0.95	-1.01	1254570lygfYlhypothetical proteinl-
STM3048_513_547	0.05	1.57	1254571lygfZlputative global regulatorl+
STM3049_257_291	0.06	-1.28	1254572lyqfAlputative hemolysinl-
STM3050_68_102	0.07	1.16	1254573lyqfBlhypothetical proteinl-
STM3051_827_861	0.09	1.21	1254574lbglAl6-phospho-beta-glucosidase Al+
STM3052_561_595	0.02	2.69	1254575lSTM3052lputative outer membrane proteinl-
STM3053_2483_2517	0.01	-1.94	1254576lgcvPlglycine dehydrogenasel-
STM3054_49_83	0.01	-3.26	1254577lgcvHlglycine cleavage system protein Hl-
STM3055_864_898	0.01	-3.23	1254578lgcvTlglycine cleavage system aminomethyltransferase Tl-
STM3056_268_302	0.07	1.41	1254579lvisClhypothetical proteinl-
STM3057_884_918	0.34	1.18	1254580lubiHl2-octaprenyl-6-methoxyphenyl hydroxylasel-
STM3058_990_1024	0.71	1.05	1254581lpepPlproline aminopeptidase P III-
STM3059.S_385_419	0.02	1.38	1254582lygfBlhypothetical proteinl-
STM3060_265_299	0.02	1.55	1254583lygfElZ-ring-associated proteinl+
STM3061_445_479	0.02	1.62	1254584lygfAlpredicted ligasel+
STM3062_298_332	0.81	-1.03	1254585lserAID-3-phosphoglycerate dehydrogenasel-
STM3063_241_275	0.00	-3.26	1254586lrpiAlribose-5-phosphate isomerase Al-
STM3064_641_675	0.03	1.23	1254587liclAlchromosome replication initiation inhibitor proteinl+
STM3065_273_307	0.05	-1.54	1254588lyggElhypothetical proteinl-
STM3066_377_411	1.00	-1.00	1254589lyggAlarginine exporter proteinl-
STM3067_769_803	0.02	-1.48	1254590lyggBlmechanosensitive channel MscSl-
STM3068_593_627	0.28	-1.22	1254591lfbalfructose-bisphosphate aldolasel-
STM3069_677_711	0.62	-1.05	1254592lpgklphosphoglycerate kinasel-
STM3070_432_466	0.01	-1.77	1254593lepdlD-erythrose 4-phosphate dehydrogenasel-
STM3071_193_227	0.06	-1.44	1254594lSTM3071lputative DNA-binding proteinl+
STM3072_453_487	0.03	-1.64	1254595lSTM3072lputative inner membrane proteinl+
STM3073_289_323	0.01	-1.97	1254596lSTM3073lputative ABC-type cobalt transport system permease componentl+

STM3074_385_419	0.09	1.34	1254597 STM3074 putative ABC-type cobalt transport system ATP-binding componentI+
STM3075_9_43	0.44	-1.10	1254598 STM3075 putative ABC-type cobalt transport system ATP-binding componentI+
STM3076_1201_1235	0.60	-1.13	1254599 tktA transketolaseI-
STM3077_257_291	0.01	1.38	1254600 yggGI putative Zn-dependent proteaseI+
STM3078_97_131	0.74	-1.06	1254601 speB agmatinaseI-
STM3079.S_129_163	0.54	-1.11	1254602 STM3079.S putative hydrolase/acyltransferaseI-
STM3081_809_843	0.05	2.09	1254604 STM3081 putative malate/L-lactate dehydrogenaseI-
STM3082_770_804	0.04	2.25	1254605 STM3082 putative zinc-binding dehydrogenaseI-
STM3083_922_956	0.37	-1.13	1254606 STM3083 putative mannitol dehydrogenaseI-
STM3084.S_297_331	0.25	1.17	1254607 STM3084.S putative regulatory proteinI-
STM3086_1106_1140	0.04	1.11	1254609 speA arginine decarboxylaseI-
STM3087_49_83	0.96	1.01	1254610 yqqB putative inner membrane proteinI-
STM3088_10_44	0.04	1.80	2673737 yqqC I+
STM3089_77_111	0.02	1.21	1254612 yqqD putative inner membrane proteinI-
STM3090_284_318	0.01	9.64	1254613 metK methionine adenosyltransferaseI+
STM3091_460_494	0.77	-1.08	1254614 galP galactose/proton symporterI+
STM3093_177_211	0.03	2.10	1254616 endA DNA-specific endonuclease II+
STM3094_65_99	0.02	-1.51	1254617 yggJ hypotheical proteinI+
STM3095_217_251	0.18	-1.20	1254618 gshB glutathione synthetaseI+
STM3096_43_77	0.18	1.42	1254619 yqqE hypotheical proteinI+
STM3097_177_211	0.01	-2.03	1254620 yqqF Holliday junction resolvase-like proteinI+
STM3100_9_43	0.06	1.45	1254623 yggS hypotheical proteinI+
STM3101_257_291	0.04	-1.16	1254624 yggT putative integral membrane proteinI+
STM3102_65_99	0.03	-1.54	1254625 yggU hypotheical proteinI+
STM3103_305_339	0.13	1.41	1254626 yggV putative deoxyribonucleotide triphosphate pyrophosphataseI+
STM3104_490_524	0.03	-1.68	1254627 yggW coproporphyrinogen III oxidaseI+
STM3105_299_333	0.00	1.78	1254628 yggM putative periplasmic proteinI-
STM3106_592_626	0.02	-1.82	1254629 ansB L-asparaginase III-
STM3107_577_611	0.36	1.13	1254630 yggN hypotheical proteinI-
STM3108_289_323	0.02	1.81	1254631 yggL hypotheical proteinI-
STM3109_673_707	0.03	1.38	1254632 trmB rRNA (guanine-N(7))-methyltransferaseI-
STM3110_118_152	0.15	-1.36	1254633 mutY adenine DNA glycosylaseI+
STM3111_85_119	0.68	-1.05	1254634 yggX hypotheical proteinI+
STM3112_407_441	0.02	-1.50	1254635 mleC murein transglycosylase Cl+

STM3113_514_548	0.35	1.20	1254636 nupG nucleoside transport +
STM3114_1457_1491	0.47	-1.09	1254637 speCl ornithine decarboxylase isozyme L-
STM3115_481_515	0.14	1.24	1254638 yqqAl putative inner membrane protein L+
STM3117_361_395	0.04	1.37	1254640 STM3117 putative lactoylglutathione lyase L-
STM3118_1063_1097	0.05	1.62	1254641 STM3118 putative acetyl-CoA hydrolase L-
STM3119_449_483	0.08	1.20	1254642 STM3119 putative monoamine oxidase L-
STM3120_753_787	0.39	-1.07	1254643 STM3120 putative transcriptional regulator L-
STM3121_673_707	0.01	1.80	1254644 STM3121 putative transcriptional regulator L+
STM3122_1637_1671	0.18	1.33	1254645 STM3122 putative arylsulfatase L-
STM3123_1146_1180	0.03	2.04	1254646 STM3123 putative arylsulfatase regulator L-
STM3124_17_51	0.01	-8.38	1254647 STM3124 putative response regulator L+
STM3125_277_313	0.05	1.30	1254648 STM3125 putative cytoplasmic protein L-
STM3126_501_535	0.09	2.29	1254649 STM3126 putative amino acid transporter L-
STM3127_173_207	0.31	-1.19	1254650 STM3127 putative cytoplasmic protein L-
STM3128_495_529	0.13	1.06	1254651 STM3128 putative oxidoreductase L-
STM3129_646_680	0.12	1.18	1254652 STM3129 putative NAD-dependent aldehyde dehydrogenase L+
STM3130_345_379	0.04	3.01	1254653 STM3130 putative cytoplasmic protein L-
STM3131_273_307	0.13	-1.11	1254654 STM3131 putative cytoplasmic protein L-
STM3132_65_99	0.68	1.11	1254655 STM3132 putative xylanase/chitin deacetylase L-
STM3133_354_388	0.02	-1.45	1254656 STM3133 putative amidohydrolase L-
STM3134_354_388	0.60	1.12	1254657 STM3134 putative permease L-
STM3135_954_988	0.01	-3.58	1254658 STM3135 mannonate dehydratase L+
STM3137_1342_1376	0.00	-4.09	1254660 STM3137 glucuronate isomerase L+
STM3138_636_670	0.04	1.67	1254661 STM3138 putative methyl-accepting chemotaxis protein L-
STM3139_1002_1036	0.01	1.60	1254662 gspL bifunctional glutathionylspermidine amidase/glutathionylspermidine synthetase L-
STM3140_769_803	0.21	1.10	1254663 yghU putative glutathione S-transferase YghU L+
STM3141_545_579	0.00	2.01	1254664 STM3141 hypothetical protein L-
STM3142_846_880	0.02	3.20	1254665 STM3142 putative periplasmic ferrichrome-binding protein L-
STM3143_113_147	0.01	-1.50	1254666 hybG hydrogenase 2 accessory protein HypG L-
STM3144_12_46	0.02	-1.28	1254667 hybA hydrogenase nickel incorporation protein HybF L-
STM3145_265_299	0.23	-1.16	1254668 hybE hydrogenase 2-specific chaperone L-
STM3146_449_483	0.13	-1.30	1254669 hybD predicted maturation element for hydrogenase 2 L-
STM3147_1249_1283	0.73	-1.03	1254670 hybC hydrogenase 2 large subunit L-
STM3148_228_262	0.16	-1.28	1254671 hybB predicted hydrogenase 2 cytochrome b type component L-
STM3149_673_707	0.04	1.19	1254672 hybA hydrogenase 2 protein HypA L-

STM3150_120_154	0.42	1.18	1254673 hypO hydrogenase 2 small subunit -
STM3151_113_147	0.20	-1.10	1254674 yghW putative cytoplasmic protein -
STM3152_1061_1095	0.05	-1.34	1254675 STM3152 putative methyl-accepting chemotaxis protein -
STM3153_201_235	0.18	1.17	1254676 yqhA hypotheslal protein -
STM3154_41_75	0.07	1.82	1254677 STM3154 putative ATP-dependent RNA helicase-like protein -
STM3155_177_213	0.03	1.52	1254678 STM3155 putative cytoplasmic protein +
STM3156_177_211	0.10	1.51	1254679 STM3156 putative cytoplasmic protein +
STM3157_545_579	0.72	1.06	1254680 yghA oxidoreductasel+
STM3158_129_163	0.34	1.08	1254681 exbD biopolymer transport protein ExbD -
STM3159_81_115	0.06	-1.20	1254682 exbB biopolymer transport protein ExbB -
STM3160_41_80	0.01	-2.20	1254683 STM3160 putative inner membrane protein -
STM3161_1101_1135	0.17	-1.23	1254684 metC cystathione beta-lyasel+
STM3162_513_547	0.02	1.90	1254685 yghB hypotheslal protein +
STM3163_577_611	0.73	-1.02	1254686 yqhC putative transcriptional regulator -
STM3164_229_263	0.04	1.99	1254687 yqhD putative alcohol dehydrogenasel+
STM3165_117_151	0.43	1.10	1254688 dkgA 2 5-diketo-D-gluconate reductase A +
STM3167_377_411	0.14	-1.21	1254690 STM3167 putative diadenosine tetraphosphatehydrolasel+
STM3168_1301_1335	0.03	-1.61	1254691 ygiR hypotheslal protein -
STM3170_53_87	0.03	1.46	1254693 STM3170 putative inner membrane protein +
STM3171_1237_1271	0.50	1.11	1254694 ygiK putative transporter +
STM3172_494_528	0.04	-1.38	1254695 isufl repressor protein for FtsII -
STM3173_337_371	0.62	-1.02	1254696 plsC 1-acyl-sn-glycerol-3-phosphate acyltransferasel-
STM3174_1644_1678	0.02	-1.74	1254697 parC DNA topoisomerase IV subunit Al-
STM3175_801_835	0.15	-1.05	1254698 STM3175 putative regulatory protein -
STM3176_203_237	0.23	-1.26	1254699 ygiW putative outer membrane protein -
STM3177_25_59	0.15	1.18	1254700 ygiX DNA-binding response regulator in two-component regulatory system with QseC +
STM3179_49_83	0.03	1.36	1254702 lmdaB NADPH-specific quinone oxidoreductasel+
STM3180_161_195	0.72	-1.08	1254703 ygiN putative cytoplasmic protein -
STM3181_1406_1440	0.02	-1.43	1254704 parE DNA topoisomerase IV subunit Bl-
STM3182_425_459	0.01	-1.96	1254705 yqiA esterase YqiA -
STM3183_135_169	0.00	-3.11	1254706 liccl cyclic 3' 5'-adenosine monophosphate phosphodiesterasel-
STM3184_385_419	0.02	-1.55	1254707 yqiB putative cytoplasmic protein -
STM3185_489_523	0.03	1.48	1254708 nudF ADP-ribose pyrophosphatase NudF -
STM3186_535_569	0.14	-1.13	1254709 tolCl outer membrane channel protein +
STM3187_123_157	0.00	2.84	1254710 ygiB hypotheslal protein +

STM3188_1029_1063	0.29	1.09	1254711lygiClputative glutathionylspermidine synthasel+
STM3189_529_563	0.17	-1.07	1254712lygiDlputative cytoplasmic proteinl-
STM3190_585_619	0.02	-1.21	1254713lygiElzinc transporter ZupTl+
STM3191_833_867	0.78	1.04	1254714ISTM3191lputative arylsulfate sulfotransferasel+
STM3192_641_675	0.43	1.08	1254715ISTM3192lputative arylsulfate sulfotransferasel+
STM3193_625_659	0.06	2.75	1254716ISTM3193lputative disulfide bond formation proteinl+
STM3194_141_175	0.24	1.10	1254717ISTM3194lputative disulfide oxidoreductasel+
STM3195_505_539	0.01	-3.93	1254718ribB13 4-dihydroxy-2-butanone 4-phosphate synthasel-
STM3196.S_33_67	0.01	1.78	1254719lyqiClputative cytoplasmic proteinl+
STM3197_113_147	0.02	-1.73	1254720lgIgSlyglycogen synthesis protein GlgSl-
STM3198_321_355	0.23	1.49	1254721ISTM3198lputative inner membrane proteinl+
STM3199_1561_1595	0.94	-1.00	1254722lyqiKlhypothetical proteinl+
STM3200_659_693	0.02	-1.84	1254723lrfaElbifunctional heptose 7-phosphate kinase/heptose 1-phosphate adenyltransferasel-
STM3201_2549_2583	0.00	-2.82	1254724lgInElbifunctional glutamine-synthetase adenylyltransferase/deadenyltransferasel-
STM3202_1199_1233	0.02	1.26	1254725lygiFlputative cytoplasmic proteinl-
STM3203_113_147	0.02	-1.35	1254726lygiMlputative signal transduction proteinl+
STM3204_1139_1173	0.33	1.18	1254727lccalmultifunctional tRNA nucleotidyl transferase/2'3'-cyclic phosphodiesterase/2'nucleotidase/phosphatasel+
STM3205_161_195	0.03	-1.29	1254728luppPlundecaprenyl pyrophosphate phosphatasel-
STM3206_257_291	0.09	1.84	1254729lfolBlbifunctional dihydroneopterin aldolase/dihydronoopterin triphosphate 2'-epimerasel-
STM3207_389_423	0.67	-1.07	1254730lygiHlhypothetical proteinl+
STM3208_307_341	0.05	1.23	1254731lgcpIO-sialoglycoprotein endopeptidasel-
STM3209_11_45	0.03	-2.18	1254732lrpsUI30S ribosomal protein S21l+
STM3210_875_909	0.00	-1.58	1254733ldnaGIDNA primasel+
STM3211.S_1185_1219	0.03	-1.44	1254734lrpoDIRNA polymerase sigma factor RpoDl+
STM3212_241_275	0.02	1.87	1254735lmugIG/U mismatch-specific DNA glycosylasel-
STM3213_29_63	0.45	-1.18	1254736lileXltRNAl+
STM3214_425_459	0.45	1.08	1254737lyqjHlputative transporterl-
STM3215_297_331	0.06	1.41	1254738lyqjllputative transcriptional regulatorl+
STM3216_567_601	0.05	-1.24	1254739ISTM3216lputative methyl-accepting chemotaxis proteinl-
STM3217_1042_1076	0.01	-1.45	1254740laerlaerotaxis sensor receptorl-
STM3218_1144_1178	0.01	-3.65	1254741loatlputrescine--2-oxoglutarate aminotransferasel+
STM3220_786_820	0.76	-1.05	1254743lygjOlputative methyltransferasel-

STM3221_337_371	0.11	1.39	1254744lygjPlputative metal-dependent hydrolasel+
STM3223_641_675	0.00	-2.94	1254746lygjRlputative dehydrogenasel+
STM3224_225_259	0.07	1.40	1254747lygjTlputative tellurite resistance proteinl+
STM3225_1142_1176	0.00	-4.52	1254748lygjUlputative dicarboxylate permeasel+
STM3226_353_387	0.18	-1.28	1254749lyqjAlhypothetical proteinl+
STM3227_273_307	0.05	1.20	1254750lyqjBlhypothetical proteinl+
STM3228_297_331	0.01	1.88	1254751lyqjClputative periplasmic proteinl+
STM3229_9_43	0.49	-1.09	1254752lyqjDlputative inner membrane proteinl+
STM3230_257_291	0.02	-1.42	1254753lyqjElputative inner membrane proteinl+
STM3231_113_147	0.04	-1.37	1254754lyqjKlputative inner membrane proteinl+
STM3232_193_227	0.89	1.03	1254755lyqjFlhypothetical proteinl+
STM3233_769_803	0.51	1.14	1254756lyqjGlputative glutathione S-transferasel+
STM3234_277_311	0.13	-1.15	1254757lyhaHlputative inner membrane proteinl+
STM3235_137_171	0.04	-1.16	1254758lyhaJlputative transcriptional regulatorl-
STM3236_449_483	0.02	1.60	1254759lyhaKlputative cytoplasmic proteinl+
STM3237_20_54	0.00	-3.02	1254760lyhaLlputative cytoplasmic proteinl+
STM3239_397_431	0.07	-1.11	1254762lyhaOlputative transport proteinl-
STM3240_918_952	0.78	1.13	1254763ltdcGIL-serine deaminasel-
STM3241_1664_1698	0.06	1.65	1254764ltdcElpyruvate formate-lyase 4/2-ketobutyrate formate-lyasel-
STM3242_258_292	0.01	-1.45	1254765ltdcDlpropionate/acetate kinasel-
STM3243_333_367	0.02	-1.61	1254766ltdcCIL-threonine/L-serine permeasel-
STM3244_641_675	0.40	-1.14	1254767ltdcBltreonine dehydratasel-
STM3245_65_99	0.03	-1.83	1254768ltdcAIDNA-binding transcriptional activatorl-
STM3246_9_43	0.99	-1.00	1254769lrnpBImisc_RNAI+
STM3247_571_605	0.03	1.87	1254770lgarKlglycerate kinase II-
STM3248_185_219	0.00	-1.66	1254771lgarRltartronate semialdehyde reductasel-
STM3249_385_419	0.05	1.53	1254772lgarLlalpha-dehydro-beta-deoxy-D-glucarate aldolasel-
STM3250_1277_1311	0.02	-1.79	1254773lgarDlgalactarate dehydrogenasel+
STM3251_649_683	0.80	-1.03	1254774lSTM3251lputative sugar kinasel-
STM3252_401_435	0.03	1.43	1254775lagaRIAg operon transcriptional repressorl-
STM3253_289_323	0.14	-1.26	1254776lgatYltagatose-bisphosphate aldolasel+
STM3254_833_867	0.03	2.15	1254777lSTM3254lputative fructose-1-phosphate kinasel+
STM3255_701_735	0.56	-1.07	1254778lSTM3255lputative phosphotransferase system fructose-specific component IIIBl+
STM3256_97_131	0.03	-1.37	1254779lSTM3256lputative phosphotransferase system mannitol/fructose-specific IIA domainl+

STM3258_81_115	0.13	-1.30	1254781lSTM3258lgalactitol-specific PTS system component IIAl+
STM3260_599_633	0.15	-1.15	1254783lSTM3260lPTS family galactitol-specific enzyme IICl+
STM3262_561_595	0.12	-1.32	1254785lSTM3262lgalactitol utilization operon transcriptional repressorl+
STM3263_689_723	0.03	1.82	1254786lyraLlputative methyltransferasel-
STM3264_1236_1270	0.00	1.41	1254787lyraMlputative transglycosylasel+
STM3265_321_355	0.13	1.26	1254788lyraNlhypothetical proteinl+
STM3266_401_435	0.00	1.74	1254789lyraODnaA initiator-associating protein DiaAl+
STM3267_321_355	0.09	1.44	1254790lyraPhypothetical proteinl+
STM3268_449_483	0.03	1.17	1254791lyraRlputative nucleoside-diphosphate-sugar epimerasel-
STM3269_193_227	0.02	-1.78	1254792lyhbOlputative intracellular proteinasel+
STM3271_47_81	0.88	1.02	1254794lyhbQlhypothetical proteinl+
STM3272_49_83	0.13	-1.28	1254795lyhbSlputative transport proteinl-
STM3273_45_79	0.49	1.08	1254796lyhbTlputative lipid carrier proteinl-
STM3274_337_371	0.08	-1.29	1254797lyhbUlputative proteasel+
STM3276_289_323	0.09	-1.28	1254799lyhbWlhypothetical proteinl+
STM3277_609_643	0.03	3.11	1254800lSTM3277lputative inner membrane proteinl-
STM3278_405_439	0.73	1.03	1254801lSTM3278lputative cytoplasmic proteinl+
STM3279_694_728	0.10	-1.34	1254802lmtrltryptophan permeasel-
STM3280.S_1563_1597	0.95	-1.01	1254803ldeaDIATP-dependent RNA helicase DeaDI-
STM3281_449_483	0.01	1.59	1254804lnlpIIIlipoprotein NlpII-
STM3282_1841_1875	0.36	-1.16	1254805lpnplpolynucleotide phosphorylase/polyadenylasel-
STM3283_201_235	0.34	-1.28	1254806lrpsO130S ribosomal protein S15l-
STM3284_609_643	0.08	-1.57	1254807ltruBltRNA pseudouridine synthase Bl-
STM3285_321_355	0.34	1.11	1254808lrbfAlribosome-binding factor Al-
STM3286_2256_2290	0.04	-1.24	1254809linfBltranslation initiation factor IF-2l-
STM3287_1400_1434	0.26	1.08	1254810lnusAltranscription elongation factor NusAl-
STM3288_241_275	0.46	1.21	1254811lyhbChypothetical proteinl-
STM3291_434_468	0.78	1.06	1254814lSTM3291lputative cytoplasmic proteinl-
STM3292_9_43	0.35	-1.19	1254815lleuUltRNAl-
STM3293_137_171	0.03	-1.26	1254816lsecGlpreprotein translocase subunit SecGl-
STM3294_339_373	0.60	1.18	1254817lgImMlphosphoglucosamine mutasel-
STM3295_673_707	0.15	-1.29	1254818lfolPldihydropteroate synthasel-
STM3296_1416_1450	0.04	-1.41	1254819lhflBIATP-dependent metalloproteasel-
STM3297_289_323	0.64	1.02	1254820lrrmJl23S rRNA methyltransferase Jl-
STM3298.S_33_67	0.06	-1.20	1254821lyhbYlRNA-binding protein YhbYl+
STM3299_203_237	0.11	-1.31	1254822lgreAltranscription elongation factor GreAl-

STM3300_563_597	0.35	1.09	1254823ldacBID-alanyl-D-alanine carboxypeptidase/endopeptidasel+
STM3301_510_544	0.01	1.60	1254824lobgElGTPase ObgEl-
STM3302_217_251	0.24	-1.09	1254825lyhbElpseudol-
STM3303_37_71	0.01	-3.11	1254826lrpmA150S ribosomal protein L27l-
STM3304_225_259	0.02	-2.43	1254827lrplUI50S ribosomal protein L21l-
STM3305_497_531	0.13	1.09	1254828lispBloctaprenyl diphosphate synthasel+
STM3306_65_99	0.01	2.07	1254829lnlpIDNA-binding transcriptional activator of maltose metabolisml+
STM3307_517_551	0.11	-1.38	1254830lmurAlUDP-N-acetylglucosamine 1-carboxyvinyltransferasel-
STM3308_209_243	0.03	-1.69	1254831lyrbAlputative transcriptional regulatorl-
STM3309_97_131	0.01	1.57	1254832lyrbBlhypothetical proteinl-
STM3310_145_179	0.03	1.28	1254833lyrbClputative transport proteinl-
STM3311_97_131	0.13	-1.50	1254834lyrbDlputative transport proteinl-
STM3312_229_263	0.03	-1.24	1254835lyrbElputative transport proteinl-
STM3313_617_651	0.08	2.04	1254836lyrbFlputative ABC transporter ATP-binding protein YrbFl-
STM3314_273_307	0.10	1.12	1254837lyrbGlputative calcium/sodium:proton antiporterl+
STM3315_929_963	0.04	-1.31	1254838lyrbHID-arabinose 5-phosphate isomerasel+
STM3316_161_195	0.18	-1.15	1254839lyrbII3-deoxy-D-manno-octulonate 8-phosphate phosphatasel+
STM3317_385_419	0.06	1.14	1254840lyrbKlhypothetical proteinl+
STM3318_129_163	0.65	-1.03	1254841lyhbNlhypothetical proteinl+
STM3319_565_599	0.14	-1.27	1254842lyhbGlputative ABC transporter ATP-binding protein YhbGl+
STM3320_643_677	0.00	-1.52	1254843lrpoNIRNA polymerase factor sigma-54l+
STM3321_217_251	0.09	-1.58	1254844lyhbHlputative sigma(54) modulation proteinl+
STM3323_457_491	0.02	-1.69	1254846lyhbJlhypothetical proteinl+
STM3324_233_267	0.01	2.12	1254847lptsOlphosphohistidinoprotein-hexose phosphotransferase component of N-regulated PTS system (Npr)l+
STM3325_369_403	0.94	1.01	1254848lyrbLlhypothetical proteinl+
STM3326_465_499	0.49	-1.17	1254849lmtgAlmonofunctional biosynthetic peptidoglycan transglycosylasel-
STM3327_129_163	0.16	1.22	1254850lyhbLlisoprenoid biosynthesis protein with amidotransferase-like domainl-
STM3328_2026_2060	0.07	1.68	1254851larcBlaerobic respiration control sensor protein ArcBl-
STM3329_283_317	0.17	-1.30	1254852lyhcClputative FeS oxidoreductasel-
STM3330_4230_4264	0.39	1.14	1254853lgltBlglutamate synthase subunit alphal+
STM3331_1380_1414	0.39	1.58	1254854lgltDlglutamate synthase subunit betal+
STM3334_1114_1148	0.79	1.04	1254857ISTM3334lcystosine deaminasel+
STM3335_209_243	0.01	-2.05	1254858lyhcHlputative cytoplasmic proteinl-
STM3336_129_163	0.00	-3.13	1254859lnanKIN-acetylmannosamine kinasel-

STM337_193_227	0.03	-1.48	1254860lnanEIN-acetylmannosamine-6-phosphate 2-epimerasel-
STM3340_545_579	0.09	1.69	1254863lyhcKltranscriptional regulator NanRl-
STM3341_409_443	0.86	1.03	1254864lsspBIClpXP protease specificity-enhancing factorl-
STM3342_145_179	0.08	1.25	1254865lsspAlstringent starvation protein Al-
STM3343_33_67	0.06	-1.88	1254866lSTM3343lputative cytoplasmic proteinl-
STM3344_321_355	0.13	1.34	1254867lrpslI30S ribosomal protein S9l-
STM3345_129_163	0.01	-2.90	1254868lrpIMl50S ribosomal protein L13l-
STM3346_1086_1120	0.02	-1.91	1254869lyhcMlputative ATPasel-
STM3347_33_67	0.13	1.31	1254870lyhcBlcytochrome d ubiquinol oxidase subunit IIIl+
STM3348_1153_1187	0.01	2.26	1254871ldegQlserine endoproteasel+
STM3349_456_490	0.16	-1.09	1254872ldegSlserine endoproteasel+
STM3350_417_451	0.07	1.35	1254873lSTM3350lputative inner membrane proteinl-
STM3353_2_37	0.03	1.26	1254876loadGloxaloacetate decarboxylase subunit gammal-
STM3354_97_131	0.26	1.29	1254877lSTM3354lL(+)tartrate dehydratase subunit betal-
STM3355_129_163	0.81	-1.02	1254878lSTM3355ltartrate dehydratase subunit alphal-
STM3356_302_336	0.13	-1.32	1254879lSTM3356lputative cation transporterl-
STM3357_65_99	0.22	1.22	1254880lSTM3357lputative regulatory proteinl-
STM3358_105_139	0.09	-1.20	1254881lSTM3358lputative regulatory proteinl-
STM3359_833_867	0.00	-5.18	1254882lmdhlmalate dehydrogenasel-
STM3360_129_163	0.02	-1.51	1254883largRlarginine repressorl+
STM3361_129_163	0.88	-1.02	1254884lyhcNlputative outer membrane proteinl+
STM3362_97_131	0.00	3.30	1254885lSTM3362lputative periplasmic proteinl+
STM3363_95_133	0.03	1.77	1254886lyhcOlputative cytoplasmic proteinl-
STM3364_1673_1707	0.82	1.04	1254887lyhcPlp-hydroxybenzoic acid efflux subunit AaeBl-
STM3365_161_195	0.12	1.30	1254888lyhcQlp-hydroxybenzoic acid efflux subunit AaeAl-
STM3366_132_166	0.03	2.37	1254889lyhcRlhypothetical proteinl-
STM3367_193_227	0.65	1.07	1254890lyhcSlputative DNA-binding transcriptional regulatorl+
STM3368_1215_1249	0.03	-1.54	1254891ltldDlmicrocin B17-processing proteinl-
STM3369_3314_3348	0.01	-1.59	1254892lyhdPlhypothetical proteinl-
STM3370_727_761	0.21	1.20	1254893lcafAlribonuclease Gl-
STM3371_513_547	0.00	-1.80	1254894lmafMaf-like proteinl-
STM3372_241_275	0.03	-1.70	1254895lMreDlrod shape-determining protein MreDl-
STM3373_374_408	0.03	-1.42	1254896lMreCllcell wall structural complex MreBCD transmembrane component MreCl-
STM3374_637_671	0.08	-1.58	1254897lMreBrod shape-determining proteinl-
STM3374.1n_61_95	0.05	1.93	2673730lSTM3374.1nlhypothetical proteinl+

STM3375_1438_1472	0.04	-1.32	1254898lyhdAlregulatory protein CsrDl-
STM3376_929_963	0.01	2.06	1254899lyhdHlputative oxidoreductasel+
STM3377_870_904	0.02	-1.43	1254900lSTM3377lputative sulfite oxidase subunit YedYl+
STM3378_449_483	0.04	-1.36	1254901lSTM3378lputative sulfite oxidase subunit YedZl+
STM3379_401_435	0.04	-1.81	1254902laccBlacetyl-CoA carboxylase biotin carboxyl carrier protein subunitl+
STM3380_863_897	0.83	-1.06	1254903laccClacetyl-CoA carboxylase biotin carboxylase subunitl+
STM3381_65_99	0.06	-1.27	1254904lyhdThypothetical proteinl+
STM3382_1093_1127	0.06	-1.41	1254905lpanFlsodium/panthothenate symporterl+
STM3383_237_271	0.83	-1.05	1254906lprmAlribosomal protein L11 methyltransferasel+
STM3385_25_59	0.06	-1.30	1254908lfislDNA-binding protein Fisl+
STM3386_697_731	0.11	1.85	1254909lyhdJlputative methyltransferasel+
STM3387_81_115	0.28	1.13	1254910lyhdUlputative periplasmic proteinl+
STM3388_1101_1135	0.05	2.51	1254911lSTM3388lputative signal transduction proteinl+
STM3389_81_115	0.12	1.13	1254912lenvRIDNA-binding transcriptional regulatorl-
STM3390_255_289	0.36	1.09	1254913lacrElacriflavine resistance protein E precursorl+
STM3391_2563_2597	0.30	1.11	1254914lacrFlmultidrug transport proteinl+
STM3392_73_107	0.00	12.55	1254915lyhdVlputative outer membrane lipoproteinl+
STM3399_225_259	0.01	-2.00	1254922lyrdAlputative ferripyochelin-binding proteinl+
STM3400_17_51	0.15	1.35	1254923lyrdBlputative periplasmic proteinl-
STM3401_433_467	0.03	-1.44	1254924laroElshikimate 5-dehydrogenasel-
STM3402_446_480	0.09	-1.47	1254925lyrdClputative ribosome maturation factorl-
STM3403_113_147	0.07	-1.19	1254926lyrdDlputative DNA topoisomerasel-
STM3404_97_131	0.01	-1.59	1254927lsmglhypothetical proteinl-
STM3405_846_880	0.03	-1.47	1254928lsmflhypothetical proteinl-
STM3406_161_195	0.06	1.14	1254929ldeflpeptide deformylasel+
STM3407_393_427	0.26	1.12	1254930lfmtlMethionyl-tRNA formyltransferasel+
STM3409_1082_1116	0.07	1.25	1254932ltrkAlpotassium transporter peripheral membrane componentl+
STM3410_193_227	0.00	1.30	1254933lmscLlarge-conductance mechanosensitive channell+
STM3411_117_152	0.04	1.65	1254934lSTM3411lputative cytoplasmic proteinl-
STM3412_81_115	0.07	1.39	1254935lzntRlzinc-responsive transcriptional regulatorl-
STM3413_241_275	0.01	2.01	1254936lyhdNlhypothetical proteinl-
STM3414_9_43	0.02	-1.87	1254937lrplQl50S ribosomal protein L17l-
STM3415_769_803	0.00	-1.91	1254938lrpoAlDNA-directed RNA polymerase subunit alphal-
STM3416_545_579	0.02	-2.46	1254939lrpsDI30S ribosomal protein S4l-
STM3417_329_363	0.10	1.84	1254940lrpsKI30S ribosomal protein S11l-
STM3418_233_267	0.01	-1.81	1254941lrpsMI30S ribosomal protein S13l-

STM3419_33_67	0.80	-1.05	1254942lrpmJl50S ribosomal protein L36l-
STM3420_333_367	0.01	-2.48	1254943lsecYlpreprotein translocase subunit SecYl-
STM3422_17_51	0.01	-3.25	1254945lrpmDI50S ribosomal protein L30l-
STM3423_209_243	0.01	-2.99	1254946lrpsEl30S ribosomal protein S5l-
STM3424_97_131	0.04	-2.39	1254947lrplRI50S ribosomal protein L18l-
STM3425_137_171	0.01	-3.17	1254948lrplFI50S ribosomal protein L6l-
STM3426_357_391	0.02	-1.88	1254949lrpsHI30S ribosomal protein S8l-
STM3427.S_97_131	0.02	-3.29	1254950lrpsNI30S ribosomal subunit protein S14l-
STM3428_353_387	0.01	-4.21	1254951lrplEI50S ribosomal protein L5l-
STM3429_233_267	0.01	-1.63	1254952lrplXI50S ribosomal protein L24l-
STM3430_33_67	0.00	-3.80	1254953lrplNI50S ribosomal protein L14l-
STM3431_129_163	0.03	-2.74	1254954lrpsQI30S ribosomal protein S17l-
STM3432_143_177	0.02	-3.00	1254955lrpmCI50S ribosomal protein L29l-
STM3433_257_291	0.01	-2.95	1254956lrplPI50S ribosomal protein L16l-
STM3434_385_419	0.03	-2.58	1254957lrpsCI30S ribosomal protein S3l-
STM3435_177_211	0.00	-8.12	1254958lrplVI50S ribosomal protein L22l-
STM3436_121_155	0.01	-2.85	1254959lrpsSI30S ribosomal protein S19l-
STM3437_225_259	0.01	-5.23	1254960lrplBI50S ribosomal protein L2l-
STM3438_153_187	0.02	-1.66	1254961lrplWI50S ribosomal protein L23l-
STM3439_529_563	0.01	-2.44	1254962lrplDI50S ribosomal protein L4l-
STM3440_385_419	0.00	-4.72	1254963lrplCI50S ribosomal protein L3l-
STM3441_225_259	0.01	-2.58	1254964lrpsJl30S ribosomal protein S10l-
STM3443_315_349	0.16	-1.29	1254966lbfrlbacterioferritin iron storage and detoxification proteinl-
STM3444_105_139	0.36	1.17	1254967lbfdlbacterioferritin-associated ferredoxinl-
STM3445_972_1006	0.04	-1.84	1254968ltuflelongation factor Tul-
STM3446_1628_1662	0.04	-1.97	1254969lfusAelongation factor Gl-
STM3447_193_227	0.03	-1.89	1254970lrpsGl30S ribosomal protein S7l-
STM3448_321_355	0.05	-1.81	1254971lrpsLI30S ribosomal protein S12l-
STM3449_217_252	0.66	1.05	1254972lyheLlhypothetical proteinl-
STM3450_165_199	0.04	-1.56	1254973lyheMlhypothetical proteinl-
STM3451_117_151	0.09	-1.59	1254974lyheNhypothetical proteinl-
STM3452_105_139	0.09	-1.51	1254975lyheOlputative regulatory proteinl-
STM3453_697_731	0.58	1.09	1254976lfkpAlFKBP-type peptidyl-prolyl cis-trans isomerase (rotamase)l-
STM3454_156_190	0.05	2.14	1254977lslyXlhypothetical proteinl+
STM3455_257_291	0.23	1.32	1254978lslyDlFKBP-type peptidyl-prolyl cis-trans isomerase (rotamase)l-
STM3456_105_139	0.74	-1.09	1254979lyhevVlputative cytoplasmic proteinl-

STM3457_1639_1673	0.03	-1.21	1254980lkefBlglutathione-regulated potassium-efflux system protein KefBl-
STM3458_97_131	0.08	-1.27	1254981lyheRlglutathione-regulated potassium-efflux system ancillary protein KefGl-
STM3459_1261_1295	0.04	-1.73	1254982lyheSlputative ABC transporter ATP-binding proteinl+
STM3460_97_131	0.00	-2.50	1254983lSTM3460lpseudol-
STM3461_161_195	0.06	1.45	1254984lSTM3461lhypothetical proteinl-
STM3462_389_423	0.01	2.03	1254985lyheTlpredicted hydrolasel+
STM3463_137_171	0.07	-1.21	1254986lyheUlhypothetical proteinl+
STM3464_545_579	0.11	1.23	1254987lprkBlputative phosphoribulokinasel+
STM3465_173_207	0.00	-2.69	1254988lyhfAlhypothetical proteinl-
STM3466_25_59	0.36	1.08	1254989lcrplcAMP-regulatory proteinl+
STM3468_515_549	0.05	1.61	1254991largDlbifunctional N-succinyldiaminopimelate-aminotransferase/acetylornithine transaminase proteinl-
STM3469_289_323	0.98	-1.00	1254992lpabAlpara-aminobenzoate synthase component III-
STM3470_329_363	0.39	1.12	1254993lficlcell filamentation protein Ficl-
STM3471_129_163	0.54	-1.11	1254994lyhfGlhypothetical proteinl-
STM3472_533_567	0.00	4.65	1254995lppiAlpeptidyl-prolyl cis-trans isomerase A (rotamase A)l-
STM3473_463_497	0.67	1.10	1254996lyhfChypothetical proteinl+
STM3474_1753_1787	0.04	1.39	1254997lnirBlnitrite reductase large subunitl+
STM3475_81_115	0.02	-1.28	1254998lnirDlnitrite reductase small subunitl+
STM3476_197_231	0.40	1.06	1254999lnirClnitrite transporter NirCl+
STM3477_1271_1305	0.01	-1.90	1255000lcysGlsiroheme synthasel+
STM3478_5535_5569	0.27	1.08	1255001lbigAlputative surface-exposed virulence proteinl+
STM3480_38_72	0.17	1.90	1255003lyhfLlputative outer membrane lipoproteinl+
STM3481_278_312	0.21	-1.38	1255004ltrpStryptophanyl-tRNA synthetasel-
STM3482_385_419	0.71	1.04	1255005lgphlphosphoglycolate phosphatasel-
STM3483_105_139	0.21	-1.17	1255006lrpelribulose-phosphate 3-epimerasel-
STM3484_417_451	0.07	1.39	1255007ldamIDNA adenine methylasel-
STM3485_631_665	0.08	-1.73	1255008ldamXlhypothetical proteinl-
STM3486_642_676	0.01	-2.43	1255009laroB13-dehydroquinate synthasel-
STM3487_449_483	0.02	-2.20	1255010laroKlshikimate kinase II-
STM3488_1000_1034	0.19	1.08	1255011hofQlpredicted fimbrial transporterl-
STM3489_129_163	0.84	-1.05	1255012lyrfAlputative inner membrane proteinl-
STM3490_363_397	0.80	-1.03	1255013lyrfBlputative inner membrane proteinl-
STM3491_481_515	0.65	-1.18	1255014lyrfClputative inner membrane proteinl-
STM3492_325_359	0.73	1.07	1255015lyrfDlputative periplasmic proteinl-

STM3493_2190_2224	0.15	-1.34	1255016lmrcAlpeptidoglycan synthetasel+
STM3494.S_145_179	0.86	1.02	1255017lnudElADP-ribose diphosphatase NudEl-
STM3495_1246_1280	0.87	-1.03	1255018lyrfFlputative inner membrane proteinl+
STM3496_177_211	0.76	-1.02	1255019lyrfGlputative hydrolasel+
STM3497_353_387	0.38	-1.07	1255020lyrfHlribosome-associated heat shock protein Hsp15l+
STM3498_65_99	0.04	1.40	1255021lhsIOlHsp33-like chaperoninl+
STM3499_1111_1145	0.03	-1.60	1255022lyhgElputative inner membrane proteinl-
STM3500_954_988	0.00	-3.82	1255023lpckAlphosphoenolpyruvate carboxykinasel+
STM3501_930_964	0.02	-1.21	1255024lenvZlosmolarity sensor proteinl-
STM3502_193_227	0.01	1.70	1255025lompRlosmolarity response regulatorl-
STM3503_429_463	0.01	1.55	1255026lgreBltranscription elongation factor GreBl+
STM3504_1969_2003	0.16	-1.22	1255027lyhgFlputative RNase Rl+
STM3505_145_179	0.01	2.45	1255028lfeoAlferrous iron transport protein Al+
STM3506_1896_1930	0.64	1.15	1255029lfeoBlferrous iron transport protein Bl+
STM3507_89_123	0.33	1.13	1255030lyhgGlputative cytoplasmic proteinl+
STM3508_841_875	0.02	1.67	1255031lSTM3508lputative cytoplasmic proteinl+
STM3509_649_683	0.13	1.39	1255032lbioHlcarboxylesterase BioHl-
STM3510_17_51	0.12	1.17	1255033lyhgHlgluconate periplasmic binding proteinl+
STM3511_449_483	0.02	5.17	1255034lyhgllpredicted gluconate transport-associated proteinl+
STM3512_846_880	0.04	-1.58	1255035lgntTlhigh-affinity gluconate permeasel+
STM3513_1856_1890	0.01	1.45	1255036lmalQl4-alpha-glucanotransferasel-
STM3514_1427_1461	0.06	1.54	1255037lmalPlmaltodextrin phosphorylasel-
STM3515_1707_1741	0.01	-3.18	1255038lmalTltranscriptional regulator MalTl+
STM3516_153_187	0.70	1.06	1255039lSTM3516lputative cytoplasmic proteinl-
STM3517_149_183	0.44	-1.09	1255040lSTM3517lputative DNA-damage-inducible proteinl-
STM3518_981_1015	0.06	1.42	1255041lrtcAIRNA 3'-terminal-phosphate cyclasel-
STM3519_1099_1133	0.64	1.08	1255042lrtcBlputative cytoplasmic proteinl-
STM3520_17_51	0.01	2.10	1255043lSTM3520lpseudol-
STM3519.1N_124_158	0.48	1.10	2673723lSTM3519.1Nl-I-
STM3521_1291_1325	0.02	1.59	1255044lSTM3521lputative ribonucleoprotein related-proteinl-
STM3523_513_547	0.02	-1.84	1255046lgpRIDNA-binding transcriptional repressorl-
STM3524_305_339	0.21	-1.12	1255047lgpGlpredicted intramembrane serine proteasel-
STM3525_65_99	0.03	-1.41	1255048lgpElthiosulfate sulfurtransferasel-
STM3526_1318_1352	0.26	1.13	1255049lgpDlglycerol-3-phosphate dehydrogenasel+
STM3527_65_99	0.10	-1.11	1255050lSTM3527lhypothetical proteinl-
STM3528_1265_1299	0.03	1.40	1255051lSTM3528lputative periplasmic phosphate-binding proteinl-

STM3529_367_401	0.04	-1.74	1255052lgldAlglycerol dehydrogenasel-
STM3530_975_1009	0.33	1.26	1255053lSTM3530lpseudol+
STM3533_201_235	0.06	1.41	1255056lSTM3533lputative transcriptional regulatorl-
STM3534_2345_2379	0.14	-1.17	1255057lgIgPIglycogen phosphorylasel-
STM3535_1043_1077	0.02	-1.62	1255058lgIgAlglycogen synthasel-
STM3536_905_939	0.17	-1.12	1255059lgIgClglucose-1-phosphate adenylyltransferasel-
STM3537_1074_1108	0.02	1.50	1255060lgIgXlglycogen debranching enzymel-
STM3538_1484_1518	0.81	-1.02	1255061lgIgBlglycogen branching enzymel-
STM3539_1020_1054	0.97	1.01	1255062lasdlaspartate-semialdehyde dehydrogenasel-
STM3540_73_107	0.04	2.37	2673721lSTM3540l-I+
STM3541_598_632	0.43	-1.05	1255064lgntUlgluconate transporter low affinity GNT 1 systeml-
STM3542_175_209	0.03	2.35	1255065lgntKlgluconate kinase 1l-
STM3543_209_243	0.01	1.94	1255066lgntRlgluconate operon transcriptional repressorl-
STM3544_641_675	0.14	1.39	1255067lyhhWlputative cytoplasmic proteinl-
STM3545_871_905	0.05	-1.43	1255068lyhhXlputative oxidoreductasel-
STM3546_321_355	0.53	1.06	1255069lyhhYlputative acetyltransferase YhhYl+
STM3547.Sc_113_147	0.01	1.55	1255070lSTM3547.Scputative transcriptional regulatorl+
STM3548_609_643	0.06	2.06	1255071lSTM3548lputative cytoplasmic proteinl+
STM3549_97_131	0.08	2.04	1255072lSTM3549lputative inner membrane proteinl+
STM3550_836_870	0.09	1.16	1255073lSTM3550lputative phosphotriesterasel+
STM3551_880_914	0.33	-1.09	1255074lggtlgamma-glutamyltranspeptidase periplasmic precursorl-
STM3552_201_235	0.12	1.32	1255075lyhhAlhypothetical proteinl+
STM3553_93_127	0.03	-1.64	1255076lugpQlcytoplasmic glycerophosphodiester phosphodiesterasel-
STM3554_552_586	0.18	-1.13	1255077lugpClglycerol-3-phosphate transporter ATP-binding subunitl-
STM3555_641_675	0.01	-1.41	1255078lugpElglycerol-3-phosphate transporter membrane proteinl-
STM3557_1118_1152	0.01	-2.39	1255080lugpBlglycerol-3-phosphate transporter periplasmic binding proteinl-
STM3558_273_307	0.46	1.07	1255081lSTM3558ldeath-on-curing proteinl-
STM3559_3_37	0.21	-1.31	1255082lyhhVlputative cytoplasmic proteinl-
STM3560_521_555	0.12	-1.23	1255083llivFleucine/isoleucine/valine transporter ATP-binding subunitl-
STM3561_49_83	0.41	1.07	1255084llivGleucine/isoleucine/valine transporter ATP-binding subunitl-
STM3562_663_697	0.85	1.02	1255085llivMleucine/isoleucine/valine transporter permease subunitl-
STM3563_657_691	0.06	-1.41	1255086llivHlbranched-chain amino acid transporter permease subunit LivHl-
STM3564_191_225	0.72	1.03	1255087llivKlhigh-affinity branched-chain amino acid transporterl-
STM3565_25_59	0.01	1.64	1255088lyhhKlputative acetyltransferasel+
STM3566_85_120	0.00	1.64	1255089lSTM3566lputative cytoplasmic proteinl+
STM3567_259_293	0.82	1.03	1255090llivJlhigh-affinity branched-chain amino acid transporterl-

STM3568_353_387	0.14	1.29	1255091lrpoH RNA polymerase factor sigma-32 -
STM3569_281_315	0.01	2.40	1255092lftsX cell division protein FtsXI-
STM3570_577_611	0.04	1.84	1255093lftsE cell division protein FtsEI-
STM3571_1357_1391	0.04	-1.13	1255094lftsY cell division protein FtsYI-
STM3572_529_563	0.96	1.01	1255095lyhhF predicted methyltransferasel+
STM3573_13_47	0.03	1.27	1255096lyhhL hypothetical proteinl+
STM3574_129_163	0.21	-1.18	1255097lyhhM putative inner membrane proteinl-
STM3575_385_419	0.58	1.03	1255098lyhhN putative inner membrane proteinl+
STM3576_1712_1746	0.27	-1.09	1255099lzntA zinc/cadmium/mercury/lead-transporting ATPasel+
STM3577_813_847	0.25	1.14	1255100ltcp methyl-accepting transmembrane citrate/phenol chemoreceptorl+
STM3578_89_123	0.00	1.86	1255101lyhhP cell developmental protein SirAl-
STM3579_249_283	0.35	-1.14	1255102lyhhQ hypothetical proteinl+
STM3580_345_379	0.01	2.46	1255103ISTM3580lhypothetical proteinl+
STM3581.S_1021_1055	0.01	1.97	1255104lyhhS hypothetical proteinl-
STM3582_83_117	0.90	-1.03	1255105lyhhT putative permeasel+
STM3583_33_67	0.03	1.67	1255106lacpT holo-(acyl carrier protein) synthase 2l+
STM3584_17_51	0.13	1.16	1255107lnikR nickel responsive regulatorl+
STM3586.S_1791_1825	0.18	-1.11	1255109lyhiH putative ABC-type multidrug transport system ATPase componentl-
STM3587_165_199	0.03	1.37	1255110lyhill hypothetical proteinl-
STM3588_774_808	0.04	-1.44	1255111lyhiN putative periplasmic proteinl-
STM3589_914_948	0.03	-1.34	1255112lpitA low-affinity phosphate transporterl+
STM3590_65_99	0.02	1.74	1255113luspB universal stress protein UspBl-
STM3591_161_195	0.11	1.34	1255114luspA universal stress protein Al+
STM3592_1111_1145	0.04	-1.14	1255115lyhiP inner membrane transporter YhiPl+
STM3593_233_267	0.40	-1.12	1255116lyhiQ putative methyltransferasel-
STM3594_1908_1942	0.12	1.34	1255117lprlC oligopeptidase Al-
STM3595_601_635	0.00	2.33	1255118ISTM3595lputative phosphatasel-
STM3596_33_67	0.11	2.14	1255119lyhiR putative cytoplasmic proteinl+
STM3597_386_420	0.83	1.05	1255120lgorgl glutathione reductasel+
STM3598_573_607	0.05	2.14	1255121ISTM3598lputative L-asparaginasel-
STM3599_705_739	0.10	-1.29	1255122ISTM3599lanaerobic C4-dicarboxylate transporterl-
STM3600_33_67	0.81	1.03	1255123ISTM3600lputative sugar kinasel-
STM3601_289_323	0.10	-1.21	1255124ISTM3601lputative phosphosugar isomerasel-
STM3602_257_291	0.48	-1.08	1255125ISTM3602lputative regulatory proteinl-

STM3603_1195_1229	0.00	2.43	1255126ltreFltrehasel+
STM3604_1071_1105	0.09	1.22	1255127lSTM3604lputative inner membrane proteinl-
STM3605_97_131	0.17	1.22	1255128lSTM3605lputative phage endolysinl+
STM3606_273_307	0.01	2.48	1255129lyhjBlputative transcriptional regulatorl-
STM3607_705_739	0.07	1.43	1255130lyhjClputative transcriptional regulatorl+
STM3608_606_640	0.27	1.56	1255131lyhjDlputative tRNA-processing ribonuclease l+
STM3609_1140_1174	0.00	-2.55	1255132lyhjElputative transport proteinl+
STM3610_1114_1148	0.22	-1.12	1255133lyhjGlputative inner membrane proteinl-
STM3611_385_419	0.51	-1.10	1255134lyhjHlEAL domain containing protein involved in flagellar functionl-
STM3612_289_323	0.01	-3.55	1255135lkdgKlketodeoxygluconokinasel+
STM3613_809_843	0.03	-1.96	1255136lyhjJlputative Zn-dependent peptidasel-
STM3614_896_930	0.01	-8.22	1255137ldctAlC4-dicarboxylate transporter DctAl-
STM3615_1743_1777	0.97	1.01	1255138lyhjKlputative diguanylate cyclase/phosphodiesterasel-
STM3616_2768_2802	0.18	-1.21	1255139lyhjLlcellulose synthase subunit BcsCl-
STM3617_511_545	0.07	-1.34	1255140lSTM3617lendo-1 4-D-glucanasel-
STM3618_1750_1784	0.39	-1.13	1255141lyhjNlcellulose synthase regulator proteinl-
STM3619_1882_1916	0.39	-1.15	1255142lbcsAlcellulose synthase catalytic subunitl-
STM3620_433_467	0.09	1.11	1255143lyhjQlcell division proteinl-
STM3621_5_39	0.69	1.03	1255144lyhjRlputative cytoplasmic proteinl-
STM3622_717_751	0.03	1.59	1255145lyhjSlputative cytoplasmic proteinl+
STM3623_125_159	0.01	2.62	1255146lyhjTlputative inner membrane proteinl+
STM3624_1449_1483	0.30	1.11	1255147lyhjUlputative inner membrane proteinl+
STM3624.1N_239_273	0.74	1.10	2673734lSTM3624.1Nl-I-
STM3624A_97_131	0.05	-1.66	1255148lSTM3624Alcystathionine gamma-synthasel+
STM3625_1140_1174	0.06	1.42	1255149lyhjVlputative transport proteinl+
STM3626_919_953	0.02	-2.04	1255150ldppFldipeptide transporter ATP-binding subunitl-
STM3627_401_435	0.00	-1.70	1255151ldppDldipeptide transporter ATP-binding subunitl-
STM3628_369_403	0.02	-1.53	1255152ldppClldipeptide transporterl-
STM3629_533_567	0.00	-3.54	1255153ldppBldipeptide transporter permease DppBl-
STM3630_777_811	0.88	1.03	1255154ldppAldipeptide transport proteinl-
STM3631_727_761	0.05	1.23	1255155lSTM3631lputative xanthine permeasel-
STM3632_926_960	0.17	-1.35	1255156lSTM3632lhypothetical proteinl-
STM3635_1149_1183	0.40	1.18	1255159lyhjWlphosphoethanolamine transferasel-
STM3636_145_179	0.01	2.00	1255160llpfEllong polar fimbrial minor proteinl-
STM3638_2106_2140	0.05	-1.30	1255162llpfCllong polar fimbrial outer membrane usher proteinl-
STM3640_353_387	0.04	1.23	1255164llpfAllong polar fimbrial protein A precursorl-

STM3641_385_419	0.79	1.04	1255165lyhjYlputative lipasel-
STM3642_97_131	0.96	1.00	1255166ltagl3-methyl-adenine DNA glycosylase II+
STM3643_81_115	0.01	-1.90	1255167lyiaChypothetical proteinl+
STM3644_1399_1433	0.06	-1.40	1255168lbisClbiotin sulfoxide reductasel-
STM3645_625_659	0.01	3.07	1255169lyiaDlpredicted outer membrane lipoproteinl+
STM3646_209_243	0.00	-1.60	1255170lyiaEl2-hydroxyacid dehydrogenasel+
STM3647_513_547	0.37	1.09	1255171lyiaFlputative outer membrane lipoproteinl-
STM3648_221_255	0.57	1.14	1255172lyiaGlpredictive transcriptional regulatorl+
STM3649_66_100	0.01	2.16	1255173lcspAlmajor cold shock proteinl+
STM3650_161_195	0.06	1.99	1255174ISTM3650lhypothetical proteinl+
STM3651_193_227	0.01	2.20	1255175ISTM3651lputative acetyltransferasel-
STM3652_215_249	0.01	1.94	1255176ISTM3652lputative cytoplasmic proteinl-
STM3653_129_163	0.07	1.22	1255177ISTM3653lputative acetyltransferasel-
STM3654_53_87	0.78	-1.02	1255178ISTM3654lpseudol-
STM3655_1615_1649	0.03	-1.95	1255179lglySlglycyl-tRNA synthetase subunit betal-
STM3656_785_819	0.01	-1.49	1255180lglyQlglycyl-tRNA synthetase subunit alphal-
STM3657_25_59	0.04	-1.47	1255181ISTM3657lputative outer membrane lipoproteinl-
STM3658_693_727	0.88	-1.01	1255182lyiaHlputative inner membrane proteinl+
STM3659_153_187	0.02	1.41	1255183lyiaBlputative inner membrane proteinl-
STM3660_1384_1418	0.04	1.28	1255184lxylBlxylulokinasel-
STM3662_1140_1174	0.01	-1.66	1255186lxylRlxyllose operon regulatory proteinl+
STM3663_769_803	0.05	1.47	1255187lbaxlhyphothetical proteinl-
STM3664_1157_1191	0.00	1.29	1255188lmalSlperiplasmic alpha-amylase precursorl+
STM3666_241_275	0.02	1.95	1255190lysaAlputative oxidoreductasel-
STM3667_465_499	0.39	-1.15	1255191lyiaJltranscriptional repressorl-
STM3668_489_523	0.88	-1.03	1255192lyiaKl2 3-diketo-L-gulonate reductasel+
STM3669_173_207	0.03	1.38	1255193lyiaLlputative cytoplasmic proteinl+
STM3670_273_307	0.10	1.64	1255194ISTM3670lputative chemotaxis proteinl+
STM3672_1175_1209	0.11	2.10	1255196lyiaNlhypothetical proteinl+
STM3673_577_611	0.02	1.73	1255197lyiaOlputative periplasmic dicarboxylate-binding proteinl+
STM3675_481_515	0.45	-1.09	1255199lsgbHl3-keto-L-gulonate-6-phosphate decarboxylasel+
STM3676_513_547	0.49	1.15	1255200lsgbUlputative L-xylulose 5-phosphate 3-epimerasel+
STM3677_417_451	0.67	-1.05	1255201lsgbEIL-ribulose-5-phosphate 4-epimerasel+
STM3680_732_766	0.00	-15.10	1255204laldBlaldehyde dehydrogenase Bl-
STM3681_609_643	0.01	1.86	1255205ISTM3681lputative transcriptional regulatorl+
STM3682_1428_1462	0.12	-1.13	1255206lselBlselenocysteinyl-tRNA-specific translation factorl-

STM3683_1001_1035	0.13	-1.11	1255207 selAlselenocysteine synthasel-
STM3684_87_121	0.13	-1.15	1255208 yibFlpredicted glutathione S-transferasel-
STM3685_1574_1608	0.01	-4.19	1255209 lmtlAlmannitol-specific enzyme IIABC componentl+
STM3686_694_728	0.00	-4.60	1255210 lmtlDImannitol-1-phosphate 5-dehydrogenasel+
STM3687_193_227	0.00	-4.38	1255211 lmtlRImannitol repressor proteinl+
STM3688_33_67	0.04	1.81	1255212 STM3688lputative cytoplasmic proteinl-
STM3689_141_175	0.01	2.10	1255213 yibLlhypothetical proteinl+
STM3690_513_547	0.04	2.62	1255214 STM3690lputative inner membrane lipoproteinl+
STM3692_1009_1043	0.02	-2.02	1255216 lildPIL-lactate permeasel+
STM3693_545_579	0.75	-1.16	1255217 lildRDNA-binding transcriptional repressorl+
STM3694_592_626	0.01	-2.65	1255218 lildDIL-lactate dehydrogenasel+
STM3695_417_451	0.01	-1.44	1255219 yibKlputative tRNA/rRNA methyltransferase YibKl+
STM3696_70_104	0.98	-1.00	1255220 STM3696lputative transcriptional regulatorl-
STM3697_838_872	0.18	1.18	1255221 STM3697lputative mandelate racemasel+
STM3698_888_922	0.27	1.33	1255222 STM3698lputative permeasel+
STM3699_513_547	0.03	1.51	1255223 cysElserine acetyltransferasel-
STM3700_533_567	0.00	-2.76	1255224 gpsAINAD(P)H-dependent glycerol-3-phosphate dehydrogenasel-
STM3701_169_203	0.00	-2.30	1255225 secBlpreprotein translocase subunit SecBl-
STM3702_129_163	0.02	-2.36	1255226 grxCglutaredoxin 3l-
STM3703_25_59	0.02	-2.18	1255227 yibNlputative rhodanese-like sulfurtransferasel-
STM3704_826_860	0.00	1.41	1255228 pmgIIphosphoglyceromutasel+
STM3705_1082_1116	0.01	-1.65	1255229 yibPlhypothetical proteinl+
STM3706_513_547	0.23	1.25	1255230 yigQlputative periplasmic proteinl+
STM3707_740_774	0.01	1.27	1255231 yibDlpredicted glycosyl transferasel-
STM3708_59_93	0.02	1.50	1255232 tdhL-threonine 3-dehydrogenasel-
STM3709_582_616	0.01	-2.33	1255233 kbII2-amino-3-ketobutyrate coenzyme A ligasel-
STM3710_305_339	0.05	1.33	1255234 rfaDIADP-L-glycero-D-mannoheptose-6-epimerasel+
STM3711_48_82	0.45	1.06	1255235 rfaFIADP-heptose:LPS heptosyltransferase III+
STM3712_817_851	0.14	1.21	1255236 rfaCIADP-heptose:LPS heptosyl transferase II+
STM3713_856_890	0.28	1.34	1255237 rfaLIO-antigen ligasel+
STM3714_947_981	0.02	2.23	1255238 rfaKlputative hexose transferasel-
STM3715_593_627	0.07	1.36	1255239 rfaZlipopolysaccharide core biosynthesis proteinl-
STM3716_445_479	0.05	1.52	1255240 rfaYlipopolysaccharide core biosynthesis proteinl-
STM3717_784_818	0.06	1.64	1255241 rfaJlipopolysaccharide glucosyltransferasel-
STM3718_480_514	0.03	-1.60	1255242 rfaLIlipopolysaccharide-alpha-1 3-D-galactosyltransferasel-

STM3719_865_899	0.21	1.16	1255243lrfaBlUDP-D-galactose:(glucosyl)lipopolysaccharide-1 6-D-galactosyltransferasel-
STM3720_111_147	0.02	1.63	1255244lyibRlputative inner membrane proteinl-
STM3721_649_683	0.05	1.60	1255245lrfaPllipopopolysaccharide core biosynthetic proteinl-
STM3722_254_288	0.11	1.17	1255246lrfaGlglycosyltransferase II-
STM3723_740_774	0.27	1.20	1255247lrfaQllipopopolysaccharide core biosynthesis proteinl-
STM3724_1175_1209	0.00	-1.32	1255248lkdtAl3-deoxy-D-manno-octulosonic-acid transferasel+
STM3725_433_467	0.02	-1.80	1255249lcoaDlphosphopantetheine adenylyltransferasel+
STM3726_129_163	0.06	1.30	1255250lmutMlformamidopyrimidine-DNA glycosylasel-
STM3727_117_151	0.01	-2.37	1255251lrpmGI50S ribosomal protein L33l-
STM3728_113_147	0.01	-2.23	1255252lrpmBI50S ribosomal protein L28l-
STM3729_577_611	0.01	-1.77	1255253lradClDNA repair protein RadCl-
STM3730_686_720	0.10	1.59	1255254ldfplbifunctional phosphopantothenoylcysteine decarboxylase/phosphopantothenate synthasel+
STM3731_145_179	0.17	-1.28	1255255ldutldeoxyuridine 5'-triphosphate nucleotidohydrolasel+
STM3732_161_195	0.05	2.36	1255256lslmAlnucleoid occlusion proteinl+
STM3733_509_543	0.56	-1.07	1255257lpyrElorotate phosphoribosyltransferasel-
STM3734_65_99	0.04	1.16	1255258lrphlribonuclease PHI-
STM3735_177_211	0.04	1.54	1255259lyicClhypothetical proteinl+
STM3736_105_139	0.05	-1.31	1255260lSTM3736lputative transcriptional regulatorl-
STM3737_577_611	0.01	2.07	1255261lSTM3737lputative Zn-dependent hydrolasel+
STM3738_393_427	0.94	-1.02	1255262lyigClputative inner membrane proteinl+
STM3739_1023_1057	0.00	-2.17	1255263lligBINAD-dependent DNA ligase LigBl-
STM3740_81_115	0.45	1.13	1255264lgmkIguanylate kinasel+
STM3741_225_259	0.21	-1.25	1255265lrpoZlDNA-directed RNA polymerase subunit omegal+
STM3742_2073_2107	0.60	1.05	1255266lspoTlbifunctional (p)ppGpp synthetase II/ guanosine-3' 5'-bis pyrophosphate 3'-pyrophosphohydrolasel+
STM3743_513_547	0.40	-1.23	1255267lspoUltRNA guanosine-2'-O-methyltransferasel+
STM3744_1979_2013	0.05	1.15	1255268lrecGIATP-dependent DNA helicase RecGl+
STM3745_273_307	0.96	-1.01	1255269lSTM3745lputative cytoplasmic proteinl-
STM3746_655_689	0.02	1.40	1255270lgltSlglutamate transport proteinl-
STM3747_993_1027	0.01	-3.32	1255271lyicElputative purine/xanthine transport proteinl+
STM3748_919_953	0.01	1.48	1255272lyicHlputative inner membrane proteinl+
STM3749_2104_2138	0.36	1.08	1255273lyicllalpha-xylosidase Yicll-
STM3750_992_1026	0.29	1.09	1255274lyicJlputative transporterl-
STM3752_305_340	0.01	1.45	1255276lSTM3752lputative cytoplasmic proteinl-

STM3753_512_546	0.18	1.09	1255277 sugRIATP binding proteinl+
STM3754_257_291	0.03	1.32	1255278 STM3754lputative cytoplasmic proteinl+
STM3755_871_905	0.02	1.72	1255279 rhuMlputative cytoplasmic proteinl+
STM3755.1N_80_115	0.01	1.55	2673725 STM3755.1NI-l-
STM3757_2349_2383	0.44	-1.11	1255281 misLlputative autotransporterl+
STM3758_305_339	0.04	1.45	1255282 fidLlputative inner membrane proteinl-
STM3759.S_705_739	0.01	2.72	1255283 marTlputative transcriptional regulatorl-
STM3760_65_99	0.24	1.34	1255284 STM3760I-I-
STM3761_417_451	0.01	3.86	1255285 slsAlputative inner membrane proteinl+
STM3762_193_227	0.02	1.83	1255286 cigRlputative inner membrane proteinl-
STM3763_2000_2034	0.33	1.16	1255287 mgfB Mg2+ transporterl-
STM3764_577_611	0.31	1.31	1255288 mgfC Mg2+ transport proteinl-
STM3765_337_371	0.01	2.28	1255289 yicLlputative permeasel+
STM3766_561_595	0.20	-1.20	1255290 STM3766lputative cytoplasmic proteinl-
STM3767_657_691	0.07	-1.09	1255291 STM3767lputative cytoplasmic proteinl-
STM3768_655_689	0.35	1.18	1255292 STM3768lputative selenocysteine synthasel-
STM3769.S_321_355	0.90	-1.03	1255293 STM3769.Slputative phosphotransferase system enzyme III-
STM3770_641_675	0.05	1.24	1255294 STM3770lputative phosphotransferase system enzyme IICl-
STM3771_81_115	0.15	1.21	1255295 STM3771lputative phosphotransferase system enzyme IIBl-
STM3772_385_419	0.12	1.19	1255296 STM3772lputative phosphotransferase system enzyme IIAI-
STM3773_2376_2410	0.01	-1.57	1255297 STM3773lputative transcriptional regulatorl-
STM3774_229_263	0.15	1.32	1255298 STM3774lputative inner membrane proteinl+
STM3775_640_674	0.02	-1.94	1255299 STM3775lputative glycosyl hydrolasel+
STM3776_723_757	0.10	-1.29	1255300 nepIIribonucleoside transporterl-
STM3777_273_307	0.02	2.75	1255301 STM3777lputative cytoplasmic proteinl+
STM3778_193_227	0.01	1.61	1255302 STM3778lputative DNA-binding proteinl+
STM3779_16_50	0.28	1.36	1255303 STM3779lputative phosphotransferase system HPr proteinl-
STM3780_549_583	0.52	1.08	1255304 gatYlputative fructose-1 6-bisphosphate aldolasel-
STM3781_694_728	0.11	1.36	1255305 STM3781lputative sugar kinasel-
STM3782_1096_1130	0.03	-1.49	1255306 STM3782lputative PTS system galactitol-specific enzyme IIC componentl-
STM3783_185_219	0.04	2.15	1255307 STM3783lputative periplasmic proteinl-
STM3784_209_243	0.01	-2.25	1255308 STM3784lputative phosphotransferase system mannitol/fructose-specific IIA domainl-
STM3785_17_52	0.01	-1.38	1255309 STM3785lputative regulatory proteinl-
STM3786_175_209	0.00	-2.32	1255310 yicNlputative inner membrane proteinl-

STM3787_593_627	0.09	1.34	1255311luhpTlsugar phosphate antiporterl-
STM3788_854_888	0.03	1.33	1255312luhpCregulatory protein UhpCl-
STM3789_744_778	0.44	1.13	1255313luhpB sensory histidine kinase UhpBl-
STM3790_137_171	0.78	-1.05	1255314luhpAIDNA-binding response regulator in two-component regulatory system wtih UhpBl-
STM3791_175_209	0.04	-1.93	1255315ISTM3791lputative cytoplasmic proteinl-
STM3794_161_195	0.48	1.07	1255318ISTM3794lputative regulatory proteinl+
STM3795_89_123	0.07	-1.72	1255319lilvNlacetolactate synthase 1 regulatory subunitl-
STM3796_962_996	0.02	-1.91	1255320lilvBlacetolactate synthase catalytic subunitl-
STM3797_9_43	0.52	-1.42	1255321lilvbLlilvB operon leader peptidel-
STM3797A_3_37	0.49	1.22	1255322lysdAl-l+
STM3796B_20_55	0.12	1.67	1255323lysdBl-l+
STM3798_378_412	0.02	1.61	1255325lemrDlmultidrug resistance protein Dl+
STM3799_279_313	0.01	1.70	1255326ISTM3799lputative periplasmic proteinl-
STM3800_17_51	0.67	1.06	1255327ldsdCIDNA-binding transcriptional dual regulatorl-
STM3801_851_885	0.37	1.09	1255328ldsdXIDsdX permeasel+
STM3802_516_550	0.04	2.22	1255329ldsdAID-serine dehydratasel+
STM3803_97_131	0.00	-4.73	1255330lyidFlputative cytoplasmic proteinl-
STM3804_148_182	0.27	-1.12	1255331lyidGlputative inner membrane proteinl-
STM3805_257_291	0.25	1.13	1255332lyidHlputative inner membrane proteinl-
STM3806_16_50	0.03	1.93	1255333ISTM3806lpseudol+
STM3807_1575_1609	0.18	1.16	1255334lyidElhypothetical proteinl-
STM3808.S_137_171	0.18	1.46	1255335libpBlheat shock chaperone IbpBl-
STM3809.S_257_291	0.04	1.90	1255336libpAlheat shock protein IbpAl-
STM3810_121_155	0.00	-2.53	1255337lyidQlhypothetical proteinl+
STM3811_804_838	0.05	1.31	1255338lyidRlputative cytoplasmic proteinl-
STM3812_882_916	0.31	1.10	1255339lccmHlputative heme lyase subunitl-
STM3820_690_724	0.05	2.68	1255347ISTM3820lputative cytochrome c peroxidasel-
STM3821_383_417	0.10	1.55	1255348ltorDlchaperone protein TorDl-
STM3822_2066_2100	0.33	-1.20	1255349ltorAltrimethylamine N-oxide reductase subunitl-
STM3823_970_1004	0.90	1.08	1255350ltorClttrimethylamine N-oxide reductase cytochrome c-like subunitl-
STM3824_569_603	0.13	-1.09	1255351ltorRIDNA-binding response regulator in two-component regulatory system with TorSl+
STM3825_570_604	0.20	-1.12	1255352ltorTlperiplasmic sensory protein associated with the TorRS two-component regulatory systeml-
STM3827_1043_1077	0.17	-1.30	1255354ldgoTlD-galactonate transport proteinl-

STM3828_446_480	0.02	-1.72	1255355ldgoAl2-oxo-3-deoxygalactonate 6-phosphate aldolase/galactonate dehydrataseI-
STM3828.1N_734_768	0.04	-1.33	2673742lSTM3828.1NI-I-
STM3829_113_147	0.80	1.02	1255356ldgoKl2-oxo-3-deoxygalactonate kinasel-
STM3830_385_419	0.03	-1.59	1255357ldgoRlgalactonate operon transcriptional repressorI-
STM3831_353_387	0.09	1.24	1255358lyidAlpredicted hydrolasel-
STM3832_680_714	0.01	1.38	1255359lSTM3832lputative permeasel+
STM3833_931_965	0.07	1.36	1255360lSTM3833lputative mandelate racemasel+
STM3834_485_519	0.04	2.70	1255361lSTM3834lputative transcriptional regulatorI+
STM3835_2056_2090	0.39	-1.14	1255362lgyrBIDNA gyrase subunit Bl-
STM3837_1062_1096	0.01	-2.23	1255364ldnaNlDNA polymerase III subunit betal-
STM3838_658_692	0.27	1.21	1255365ldnaAlchromosomal replication initiation proteinI-
STM3839_13_47	0.01	-3.04	1255366lrpmHl50S ribosomal protein L34l+
STM3840_177_211	0.05	-1.58	1255367lrnpAlribonuclease Pl+
STM3842_1128_1162	0.00	-2.21	1255369lyidClputative inner membrane protein translocase component YidCl+
STM3843_1006_1040	0.04	1.12	1255370ltrmElrRNA modification GTPase TrmEl+
STM3844_478_512	0.31	1.14	1255371lSTM3844lpseudol+
STM3845_369_403	0.01	2.33	1255372lSTM3845lputative inner membrane proteinI+
STM3847_477_511	0.00	1.38	1255374lyidYlmultidrug efflux system protein MdtLl+
STM3848_521_555	0.09	1.23	1255375lyidZlDNA-binding transcriptional regulator YidZl+
STM3849_561_595	0.43	1.23	1255376lyieElputative cytoplasmic proteinI+
STM3850_489_523	0.13	-1.23	1255377lyieFlputative oxidoreductasel+
STM3851.S_1147_1181	0.05	-1.27	1255378lyieGlhypothetical proteinI-
STM3852_97_131	0.00	-2.16	1255379lyieHlpredicted hydrolasel+
STM3853_53_87	0.05	-1.48	1255380lphoUltranscriptional regulator PhoUl-
STM3854_673_707	0.02	-1.51	1255381lpstBlphosphate transporter subunitI-
STM3855_73_107	0.11	-1.27	1255382lpstAlphosphate transporter permease subunitI-
STM3856_897_931	0.03	-1.39	1255383lpstClphosphate transporter permease subunitI-
STM3857_634_668	0.11	-1.34	1255384lpstSlphosphate transporter subunitI-
STM3858_923_957	0.63	1.02	1255385lSTM3858lputative phosphotransferase system fructose-specific component IIBl-
STM3859_481_515	0.48	1.12	1255386laroElshikimate 5-dehydrogenasel-
STM3860_999_1033	0.11	1.25	1255387lSTM3860lputative dipeptide/oligopeptide/nickel ABC-type transport system periplasmic componentI+
STM3861_895_929	0.14	-1.11	1255388lgImSID-fructose-6-phosphate amidotransferasel-

STM3862_1268_1302	0.02	1.69	1255389lgImUlbifunctional N-acetylglucosamine-1-phosphate uridyltransferase/glucosamine-1-phosphate acetyltransferasel-
STM3863_177_211	0.11	1.29	1255390lSTM3863lputative permeasel-
STM3864_129_163	0.11	-1.31	1255391latpClFOF1 ATP synthase subunit epsilonl-
STM3865_480_514	0.22	-1.33	1255392latpDFOF1 ATP synthase subunit betal-
STM3866_641_675	0.01	-1.83	1255393latpGFOF1 ATP synthase subunit gammal-
STM3867_1343_1377	0.20	-1.34	1255394latpAFOF1 ATP synthase subunit alphal-
STM3868_321_355	0.07	-1.27	1255395latpHFOF1 ATP synthase subunit deltal-
STM3869_57_91	0.51	1.07	1255396latpFIFO1 ATP synthase subunit Bl-
STM3870_177_211	0.07	-1.38	1255397latpEFOF1 ATP synthase subunit Cl-
STM3871_769_803	0.01	-1.68	1255398latpBFOF1 ATP synthase subunit Al-
STM3872_9_43	0.04	-1.43	1255399latpIIFOF1 ATP synthase subunit II-
STM3873.S_65_99	0.01	-1.68	1255400lgidBlglucose-inhibited division protein Bl-
STM3874_1275_1309	0.02	-1.73	1255401gidAltRNA uridine 5-carboxymethylaminomethyl modification enzyme GidAl-
STM3875_105_139	0.01	-2.21	1255402lmioClflavodoxinl-
STM3876_337_371	0.04	1.41	1255403lasnCIDNA-binding transcriptional regulator AsnCl-
STM3877_745_779	0.02	1.73	1255404lasnAlasparagine synthetase AsnAl+
STM3878.S_1381_1415	0.13	-1.22	1255405lyieMlhypothetical proteinl-
STM3879_538_572	0.01	1.98	1255406lyieNlputative regulatory proteinl-
STM3880_1510_1544	0.01	-1.51	1255407ltrkDlpotassium transport protein Kupl+
STM3881_225_259	0.98	1.01	1255408lrbsDlhigh-affinity D-ribose transport proteinl+
STM3882_763_797	0.00	-2.10	1255409lrbsAID-ribose transporter ATP binding proteinl+
STM3883_561_595	0.02	-2.11	1255410lrbsClribose ABC transporter permease proteinl+
STM3884_361_395	0.04	-1.47	1255411lrbsBID-ribose transporter subunit RbsBl+
STM3885_193_227	0.01	-3.96	1255412lrbsKlribokinasel+
STM3886_161_195	0.01	-1.62	1255413lrbsRltranscriptional repressor RbsRl+
STM3887_1197_1231	0.41	-1.09	1255414lyieOlputative tranport proteinl-
STM3888_481_515	0.20	1.13	1255415lyiePlputative regulatory proteinl-
STM3893_11_48	0.02	-2.09	1255419l9Slmisc_RNAI+
STM3896_6_40	0.02	-2.23	1255422ltrpTlTrNAI+
STM3897_97_131	0.01	1.18	1255423lyifAltranscriptional regulator HdfRl-
STM3898_97_131	0.01	-2.29	1255424lyifElhypothetical proteinl+
STM3899_522_556	0.03	1.36	1255425lyifBlputative ATP-dependent proteasel-
STM3900_9_43	0.88	-1.10	1255426lilvLlilvG operon leader peptidel+
STM3901_776_810	0.00	-13.21	1255427lilvGlacetolactate synthase 2 catalytic subunitl+

STM3902_9_43	0.00	-11.02	1255428lilvMlacetolactate synthase 2 regulatory subunit+
STM3903_833_867	0.00	-9.87	1255429lilvElbranched-chain amino acid aminotransferasel+
STM3904_1236_1270	0.00	-13.51	1255430lilvDldihydroxy-acid dehydratasel+
STM3905_1202_1236	0.00	-13.42	1255431lilvAlthreonine dehydratasel+
STM3906_33_67	0.31	-1.18	1255432lSTM3906lputative cytoplasmic proteinl+
STM3907_13_47	0.03	-1.33	1255433lSTM3907lputative cytoplasmic proteinl+
STM3908_609_643	0.03	2.52	1255434lilvYIDNA-binding transcriptional regulator IlvYl-
STM3910_165_199	0.13	1.22	1255436lppiClpeptidyl-prolyl cis-trans isomerase Cl-
STM3911_89_123	0.01	1.51	1255437lSTM3911lputative inner membrane proteinl+
STM3912_1330_1364	0.03	-1.55	1255438lreplATP-dependent DNA helicase Repl+
STM3913_1059_1093	0.26	1.21	1255439lgppAlguanosine pentaphosphate phosphohydrolasel-
STM3914_1099_1133	0.03	-1.22	1255440lrhlBIATP-dependent RNA helicase RhlBl-
STM3915_205_239	0.63	1.09	1255441ltrxAldihioredoxinl+
STM3916_3_37	0.12	1.61	1255442lrhoLlpseudol+
STM3917_421_455	0.92	1.02	1255443lrholtranscription termination factor Rhol+
STM3918_649_683	0.96	1.00	1255444lrfelundecaprenyl-phosphate N-acetylglucosaminyltransferasel+
STM3919_368_402	0.05	-1.26	1255445lwzzEllipopolysaccharide biosynthesis protein WzzEl+
STM3920_708_742	0.10	1.20	1255446lwecBUDP-N-acetyl glucosamine-2-epimerasel+
STM3921_984_1018	0.09	1.23	1255447lwecCIUDP-N-acetyl-D-mannosamine dehydrogenasel+
STM3922_389_423	0.23	1.09	1255448lrffGldTDP-glucose 4 6-dehydratasel+
STM3923_177_211	0.01	1.61	1255449lrffHlglucose-1-phosphate thymidyl transferasel+
STM3924_473_507	0.34	1.42	1255450lwecDITDP-fucosamine acetyltransferasel+
STM3925_420_454	0.09	1.18	1255451lwecEITDP-4-oxo-6-deoxy-D-glucose transaminasel+
STM3926_556_590	0.60	1.10	1255452lwzxElO-antigen translocasel+
STM3927_929_963	0.28	1.08	1255453lSTM3927l4-alpha-L-fucosyltransferasel+
STM3928_1288_1322	0.23	1.35	1255454lwecFlputative enterobacterial common antigen polymerasel+
STM3929_65_99	0.02	1.41	1255455lwecGlputative UDP-N-acetyl-D-mannosaminuronic acid transferasel+
STM3930_1203_1237	0.27	-1.28	1255456lyifKlputative transport protein YifKl+
STM3931_33_67	0.85	1.16	1255457largXltRNAl+
STM3935_841_875	0.19	-1.21	1255461lhemYlputative protoheme IX biogenesis proteinl-
STM3936_659_693	0.68	-1.05	1255462lhemXlputative uroporphyrinogen III C-methyltransferasel-
STM3937_321_355	0.01	-1.44	1255463lhemDluroporphyrinogen-III synthasel-
STM3938_241_275	0.03	-1.58	1255464lhemClporphobilinogen deaminasel-
STM3939_1964_1998	0.00	3.19	1255465lcyaAladenylate cyclasel+
STM3940_313_347	0.60	1.05	1255466lSTM3940lputative inner membrane proteinl+
STM3941_297_331	0.96	-1.00	1255467lSTM3941lputative inner membrane proteinl+

STM3942_315_349	0.76	1.01	1255468 STM3942 putative cytoplasmic proteinl+
STM3943_141_175	0.07	1.53	1255469 cyaY frataxin-like proteinl-
STM3944_305_339	0.29	1.39	1255470 STM3944 putative inner membrane proteinl-
STM3945_145_179	0.04	1.70	1255471 STM3945 pseudol-
STM3946_9_45	0.02	1.69	1255472 yifL putative outer membrane lipoproteinl+
STM3947_769_803	0.48	-1.08	1255473 dapF diaminopimelate epimerasel+
STM3948_409_443	0.86	-1.02	1255474 yigA hypothetical proteinl+
STM3949_97_131	0.02	1.26	1255475 xerC site-specific tyrosine recombinase XerCl+
STM3950_65_99	0.02	-1.28	1255476 yigB predicted hydrolasel+
STM3951_1836_1870	0.06	1.43	1255477 uvrD DNA-dependent helicase III+
STM3952_273_307	0.51	1.09	1255478 corA magnesium/nickel/cobalt transporter CorAl+
STM3953_273_307	0.01	1.79	1255479 yigF putative inner membrane proteinl-
STM3955_577_611	0.14	1.14	1255481 rarD chloramphenicol resistance-
STM3956_49_83	0.00	-3.44	1255482 yigG hypothetical proteinl-
STM3957_769_803	0.00	-1.68	1255483 pldA phospholipase A1+
STM3958_1361_1395	0.08	-1.29	1255484 recQ ATP-dependent DNA helicase RecQl+
STM3959_533_567	0.03	-1.41	1255485 rhtC threonine efflux systeml+
STM3960_65_99	0.08	-1.27	1255486 rhtB homoserine/homoserine lactone efflux proteinl-
STM3961_482_516	0.13	1.16	1255487 pldB lysophospholipase L2l+
STM3962_129_163	0.07	1.08	1255488 yigL predicted hydrolasel+
STM3963_273_307	0.22	1.21	1255489 yigM putative transport proteinl+
STM3964_529_563	0.01	11.23	1255490 metR metE/methH regulatorl-
STM3965_1930_1964	0.26	1.81	1255491 metE 5-methyltetrahydropteroylglutamate--homocysteine methyltransferasel+
STM3966_521_555	0.40	-1.11	1255492 STM3966 putative arylsulfatase regulatorl+
STM3967_705_739	0.03	-1.33	1255493 dlhH putative dienelactone hydrolasel-
STM3968_481_515	1.00	1.00	1255494 udpluridine phosphorylasel+
STM3969_1152_1186	0.04	1.86	1255495 yigN DNA recombination protein RmuCl+
STM3970_321_355	0.30	1.17	1255496 ubiE ubiquinone/maequinone biosynthesis methyltransferasel+
STM3971_193_227	0.10	-1.23	1255497 yigP putative inner membrane proteinl+
STM3972_1122_1156	0.10	1.33	1255498 ubiB putative ubiquinone biosynthesis protein UbiBl+
STM3973_29_63	0.09	1.19	1255499 tatA twin arginine translocase protein Al+
STM3974_433_467	0.03	1.49	1255500 tatB sec-independent translocasel+
STM3975_297_331	0.22	1.20	1255501 tatC tA-BCE protein translocation system subunitl+
STM3977_289_323	0.28	1.18	1255503 rfaH transcriptional activator RfaHl-
STM3978_1232_1266	0.00	-1.44	1255504 yigC 3-octaprenyl-4-hydroxybenzoate decarboxylasel+

STM3979_529_563	0.04	-1.38	1255505 freI FMN reductasel+
STM3980_193_227	0.01	2.73	1255506 STM3980 putative outer membrane proteinl+
STM3981_60_94	0.03	2.02	1255507 STM3981 putative cytoplasmic proteinl+
STM3982_287_321	0.00	-12.42	1255508 fadA 3-ketoacyl-CoA thiolasel-
STM3983_1447_1481	0.03	-2.05	1255509 fadB multifunctional fatty acid oxidation complex subunit alphaI-
STM3984_1005_1039	0.03	-1.48	1255510 pepQ proline dipeptidasel+
STM3985_289_323	0.02	-1.77	1255511 yigZ hypothetical proteinl+
STM3986_869_903	0.19	-1.40	1255512 trkH potassium transporterl+
STM3987_153_187	0.06	-1.21	1255513 hemG protoporphyrinogen oxidasel+
STM3989/STM4133_4_38	0.03	-1.58	1255515/1255659 ileT/ileU tRNAI+
STM3993_417_451	0.04	2.14	1255519 mobB molybdopterin-guanine dinucleotide biosynthesis protein Bl-
STM3994_129_163	0.04	1.33	1255520 mobA molybdopterin-guanine dinucleotide biosynthesis protein Al-
STM3995_97_131	0.94	1.02	1255521 yihD putative cytoplasmic proteinl+
STM3996_641_675	0.04	1.59	1255522 yihE predicted kinasel+
STM3997_353_387	0.01	2.42	1255523 dsbA periplasmic protein disulfide isomerase II+
STM3998_193_227	0.08	2.88	1255524 yihG putative endonucleasel-
STM3999_2300_2334	0.29	-1.06	1255525 polA DNA polymerase II+
STM4000_27_65	0.05	4.19	2673732 spfI misc_tRNAI+
STM4001_465_499	0.12	1.19	1255527 yihA GTPase EngBl-
STM4002_48_82	0.80	-1.09	1255528 STM4002 putative cytoplasmic proteinl+
STM4003_289_323	0.06	-1.63	1255529 yihH hypothetical proteinl+
STM4004_1079_1113	0.19	1.19	1255530 hemN coproporphyrinogen III oxidasel+
STM4005_475_509	0.29	-1.10	1255531 glnG nitrogen regulation protein NR(I)l-
STM4006_307_341	0.02	2.68	1255532 glnL nitrogen regulation protein NR(II)l-
STM4007_475_509	0.04	1.85	1255533 glnA glutamine synthetasel-
STM4009_1145_1179	0.94	1.04	1255535 typA GTP-binding proteinl+
STM4010_129_163	0.17	1.42	1255536 STM4010 putative hydrolasel-
STM4011_833_867	0.08	1.66	1255537 STM4011 putative inner membrane proteinl-
STM4013.S_737_771	0.24	1.37	1255539 STM4013.S putative membrane-associated metal-dependent hydrolasel-
STM4014_289_323	0.63	-1.06	1255540 STM4014 putative periplasmic proteinl-
STM4015_625_659	0.01	1.52	1255541 STM4015 putative cytoplasmic proteinl-
STM4016_307_341	1.00	-1.00	1255542 yshA predicted outer membrane porin Ll-
STM4017_1095_1129	0.10	1.59	1255543 yihO putative GPH family transport proteinl-
STM4018_1120_1154	0.01	1.63	1255544 yihP putative GPH family transport proteinl-
STM4020.S_353_387	0.11	1.19	1255546 yihR putative aldose-1-epimerasel-

STM4021_979_1013	0.91	-1.09	1255547lyihS putative isomerasel-
STM4022_801_835	0.71	-1.03	1255548lyihT putative aldolasel-
STM4023_257_291	0.16	-1.29	1255549lyihU putative oxidoreductasel-
STM4024.S_33_67	0.37	-1.16	1255550lyihV putative sugar kinasel+
STM4025_33_67	0.02	-1.57	1255551lyihW putative glycerol-3-phosphate regulon repressorl+
STM4026_257_291	0.01	1.72	1255552lyihX phosphatasel+
STM4027_593_627	0.18	1.14	1255553lrbn ribonuclease BNI+
STM4028_2_36	0.10	1.72	1255554lyihZ D-tyrosyl-tRNA deacylasel+
STM4029_929_963	0.41	-1.10	1255555lyiiD putative acetyltransferasel+
STM4030.S_253_287	0.03	2.25	1255556ISTM4030.S putative cytoplasmic proteinl-
STM4031_257_291	0.00	2.32	1255557ISTM4031l putative cytoplasmic proteinl-
STM4032_257_291	0.07	1.14	1255558ISTM4032l putative acetyl esterasel-
STM4032.2N_97_131	0.48	1.21	2673731ISTM4032.2N hypothetical proteinl+
STM4033_161_195	0.23	-1.21	1255559ISTM4033l putative regulatory proteinl+
STM4034_321_355	0.35	1.11	1255560lfdhE formate dehydrogenase accessory protein FdhEl-
STM4035_421_455	0.87	-1.03	1255561fdoll formate dehydrogenase-O subunit gammal-
STM4036_681_715	0.04	-1.25	1255562lfdoH formate dehydrogenase-O beta subunitl-
STM4037_2884_2918	0.07	1.86	1255563lfdoG formate dehydrogenase alpha subunitl-
STM4038_425_459	0.01	1.92	1255564lfdhD formate dehydrogenase accessory proteinl+
STM4039_929_963	0.33	1.26	1255565ISTM4039l putative inner membrane lipoproteinl-
STM4040_548_582	0.45	1.06	1255566lyiiG putative cytoplasmic proteinl+
STM4041_249_283	0.05	1.54	1255567ISTM4041l putative inner membrane proteinl-
STM4042_493_527	0.02	1.95	1255568ISTM4042l putative branched-chain amino acid permeasel-
STM4042A_105_139	0.00	2.93	1255569ISTM4042Al hypothetical proteinl+
STM4043_49_83	0.01	-2.60	1255570lyiiL putative cytoplasmic proteinl-
STM4044_438_472	0.00	-5.55	1255571ISTM4044l putative alcohol dehydrogenasel-
STM4046_709_743	0.53	1.19	1255573lrhaA L-rhamnose isomerasel-
STM4047_983_1017	0.70	1.08	1255574lrhaB L-rhamnulokinasel-
STM4048_449_483	0.24	-1.06	1255575lrhaS L-rhamnose operon regulatory proteinl+
STM4049_289_323	0.01	-2.58	1255576lrhaR lrhaRS operon regulatory proteinl+
STM4050_740_774	0.80	-1.12	1255577lrhaT L-rhamnose/H+ symporter proteinl-
STM4052_741_775	0.02	-1.17	1255579ISTM4052l putative C4-dicarboxylate transport systeml-
STM4053_209_243	0.01	1.49	1255580ISTM4053l putative C4-dicarboxylate transport systeml-
STM4054_321_355	0.51	1.25	1255581ISTM4054l putative periplasmic dicarboxylate-binding proteinl-
STM4055_49_83	0.11	-1.13	1255582lsodA superoxide dismutasel+
STM4056.S_545_579	0.03	-1.83	1255583lyiiM hypothetical proteinl+

STM4057_327_361	0.02	-1.06	1255584 STM4057 putative inner membrane proteinl+
STM4058_1079_1113	0.25	1.15	1255585 cpxA two-component sensor proteinl-
STM4059_399_433	0.12	1.55	1255586 cpxR DNA-binding response regulator in two-component regulatory system with CpxA -
STM4060_137_171	0.00	13.88	1255587 cpxP periplasmic repressor CpxP -
STM4061_385_419	0.04	1.28	1255588 fieF ferrous iron efflux protein F -
STM4062_129_163	0.06	1.37	1255589 pfkA 6-phosphofructokinase -
STM4063_769_803	0.76	1.29	1255590 sbp sulfate transporter subunit -
STM4064_161_195	0.13	1.60	1255591 ushB CDP-diacylglycerol pyrophosphatase -
STM4066_625_659	0.14	-1.62	1255593 STM4066 aminoimidazole riboside kinase -
STM4067_778_812	0.14	-1.12	1255594 STM4067 putative ADP-ribosylglycohydrolase -
STM4068_161_195	0.14	1.30	1255595 STM4068 putative regulatory proteinl+
STM4069_33_67	0.13	1.42	1255596 STM4069 putative periplasmic proteinl+
STM4070_53_87	0.75	-1.05	1255597 STM4070 putative cytoplasmic proteinl+
STM4071_25_59	0.05	-12.37	1255598 STM4071 putative mannose-6-phosphate isomerase -
STM4072_1330_1364	0.15	-4.36	1255599 ydeV autoinducer-2 (AI-2) kinase -
STM4074_1257_1291	0.06	-8.53	1255601 legol putative ABC-type aldose transport system ATPase component -
STM4075_333_367	0.06	-9.36	1255602 ydeY putative sugar transport proteinl+
STM4076_139_173	0.15	-4.14	1255603 ydeZ putative sugar transport proteinl+
STM4078_289_323	0.02	-22.30	1255605 yneB aldolase -
STM4079_S_97_131	0.19	-3.71	1255606 yneC autoinducer-2 (AI-2) modifying protein LsrG -
STM4080_673_707	0.03	-11.48	1255607 STM4080 ribulose-phosphate 3-epimerase -
STM4081_193_227	0.10	1.28	1255608 tpiA triosephosphate isomerase -
STM4082_457_491	0.40	-1.15	1255609 yiiQ putative periplasmic proteinl-
STM4083_333_367	0.36	1.12	1255610 yiiR putative inner membrane proteinl+
STM4084_37_71	0.01	1.73	1255611 fpr ferredoxin-NADP reductase -
STM4085_940_974	0.04	-2.05	1255612 glpX fructose 1,6-bisphosphatase III -
STM4086_678_712	0.00	-51.35	1255613 glpK glycerol kinase -
STM4087_545_579	0.00	-32.58	1255614 glpF glycerol diffusion -
STM4088_199_233	0.07	-1.33	1255615 yiiU putative cytoplasmic proteinl+
STM4089_441_475	0.00	3.21	1255616 meng ribonuclease activity regulator protein RraA -
STM4090_289_323	0.26	1.15	1255617 mengA 1,4-dihydroxy-2-naphthoate octaprenyltransferase -
STM4091_365_399	0.08	1.38	1255618 hslU ATP-dependent protease ATP-binding subunit -
STM4092_233_267	0.05	1.77	1255619 hslV ATP-dependent protease peptidase subunit -
STM4093_897_931	0.02	1.37	1255620 ftsN essential cell division protein -
STM4094_603_637	0.92	1.02	1255621 cytR DNA-binding transcriptional regulator CytR -

STM4095_1912_1946	0.70	-1.06	1255622 priAl primosome assembly protein PriAl-
STM4096_127_161	0.17	1.33	1255623 rpmE 50S ribosomal protein L31l+
STM4097_321_355	0.08	1.79	1255624 STM4097 putative outer membrane lipoproteinl-
STM4098_1144_1178	0.07	1.92	1255625 STM4098 putative arylsulfate sulfotransferasel-
STM4099_205_239	0.01	3.02	1255626 metJ transcriptional repressor protein MetJl-
STM4100_290_324	0.02	10.64	1255627 metB cystathione gamma-synthasel+
STM4101_1658_1692	0.02	4.25	1255628 metL functional aspartate kinase II/homoserine dehydrogenase IIIl+
STM4102_245_279	0.01	2.09	1255629 STM4102 putative inner membrane proteinl-
STM4103_926_960	0.01	-2.88	1255630 STM4103 putative cytoplasmic proteinl-
STM4104_1198_1232	0.18	1.28	1255631 STM4104 putative 5'-nucleotidase/2' 3'-cyclic phosphodiesterasel+
STM4105_385_419	0.01	6.11	1255632 metF 5 10-methylenetetrahydrofolate reductasel+
STM4106_1726_1760	0.01	-3.63	1255633 katG hydroperoxidasel+
STM4107_65_99	0.16	1.65	1255634 yijF putative periplasmic proteinl-
STM4108_605_639	0.98	-1.01	1255635 gldA glycerol dehydrogenasel-
STM4109_577_611	0.01	1.69	1255636 talC fructose-6-phosphate aldolasel-
STM4110_1631_1665	0.01	-2.13	1255637 ptsA PEP-protein phosphotransferasel-
STM4112_363_397	0.03	1.24	1255639 frwC PTS system fructose-like IIC componentl+
STM4113_193_227	0.12	-1.32	1255640 frwB PTS system fructose-like IIB component 1l+
STM4114_2003_2037	0.07	1.27	1255641 pfld predicted formate acetyltransferase 2 (pyruvate formate lyase II)l+
STM4115_161_195	0.12	1.44	1255642 pfIC pyruvate formate lyase II activasel+
STM4116_177_211	0.09	1.20	1255643 frwD PTS system fructose-like IIB component 2l+
STM4117_417_451	0.40	-1.10	1255644 yijO putative regulatory proteinl-
STM4119_2517_2551	0.42	1.23	1255646 ppcl phosphoenolpyruvate carboxylasel-
STM4120_793_827	0.01	2.49	1255647 argE acetylornithine deacetylasel-
STM4122_321_355	0.46	1.14	1255649 argB acetylglutamate kinasel+
STM4123_1154_1188	0.04	1.54	1255650 argH argininosuccinate lyasel+
STM4125_321_355	0.11	1.35	1255651 oxyR DNA-binding transcriptional regulator OxyRl+
STM4126_1330_1364	0.00	-2.04	1255652 udhA soluble pyridine nucleotide transhydrogenasel-
STM4127_401_435	0.02	1.42	1255653 yijC DNA-binding transcriptional repressor FabRl+
STM4128_97_131	0.20	1.29	1255654 yijD hypothetical proteinl+
STM4129_102_136	0.04	-1.26	1255655 trmAltRNA (uracil-5-)-methyltransferasel-
STM4130_1486_1520	0.02	-1.76	1255656 btuB vitamin B12/cobalamin outer membrane transporterl+
STM4131_449_483	0.01	1.58	1255657 murl glutamate racemasel+
STM4137_862_896	0.02	1.70	1255663 murBL UDP-N-acetylenolpyruvoylglycosamine reductasel+
STM4138_513_547	0.05	1.14	1255664 birA biotin--protein ligasel+

STM4139_609_643	0.83	-1.05	1255665lcoaAlpantothenate kinasel-
STM4140_65_100	0.65	1.20	1255666lSTM4140lpseudol-
STM4141_117_151	0.59	-1.04	1255667lSTM4141lputative cytoplasmic proteinl-
STM4146_980_1014	0.01	-2.78	1255672ltufelongation factor Tul+
STM4147_225_259	0.06	-1.25	1255673lseclpreprotein translocase subunit SecEl+
STM4148_193_227	0.01	-1.76	1255674lnusGltranscription antitermination protein NusGl+
STM4149_385_419	0.01	-3.39	1255675lrplKI50S ribosomal protein L11l+
STM4150_137_171	0.01	-4.70	1255676lrplAI50S ribosomal protein L1l+
STM4151_225_259	0.01	-2.25	1255677lrplJI50S ribosomal protein L10l+
STM4153_3350_3384	0.05	-2.26	1255679lrpoBIDNA-directed RNA polymerase subunit betal+
STM4154_3225_3259	0.01	-3.86	1255680lrpoCIDNA-directed RNA polymerase subunit beta'l+
STM4155_3_37	0.01	-1.89	1255681lSTM4155lputative inner membrane proteinl+
STM4156_127_164	0.01	2.38	1255682lSTM4156lputative cytoplasmic proteinl-
STM4157_780_814	0.89	-1.02	1255683lSTM4157lputative cytoplasmic proteinl+
STM4157.1N_55_89	0.28	1.96	2673736lSTM4157.1Nl-
STM4158_93_127	0.01	3.28	1255684lSTM4158lputative cytoplasmic proteinl+
STM4159_647_681	0.15	-1.64	1255685lthiHlthiamine biosynthesis protein ThiHl-
STM4160_122_156	0.05	-2.12	1255686lthiGlthiazole synthasel-
STM4162_353_387	0.06	-1.80	1255688lthiFlthiamine biosynthesis protein ThiFl-
STM4163_193_227	0.04	-2.35	1255689lthiElthiamine-phosphate pyrophosphorylasel-
STM4164_1313_1347	0.98	1.01	1255690lthiClthiamine biosynthesis protein ThiCl-
STM4165_81_115	0.06	-1.48	1255691lrsdlanti-RNA polymerase sigma 70 factorl-
STM4166_737_771	0.02	1.69	1255692lnudCNADH pyrophosphatasel+
STM4167_402_436	0.03	1.32	1255693lhemElporphyrinogen decarboxylasel+
STM4168_161_195	0.02	1.23	1255694lfilendonuclease VI+
STM4169_481_515	0.10	1.52	1255695lyjaGlputative cytoplasmic proteinl+
STM4170_113_147	0.01	-1.80	1255696lhupAltranscriptional regulator HU subunit alphal+
STM4171_577_611	0.13	-1.32	1255697lyjaHlputative inner membrane proteinl+
STM4172_305_339	0.09	1.45	1255698lzraPlzinc resistance proteinl-
STM4173_895_929	0.45	-1.20	1255699lhydHlsensor protein ZraSl+
STM4174_471_505	0.15	-1.28	1255700lhydGltranscriptional regulatory protein ZraRl+
STM4175_803_837	0.00	-3.78	1255701lpurDlphosphoribosylamine--glycine ligasel-
STM4176_1503_1537	0.00	-4.97	1255702lpurHlbfunctional phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolasel-
STM4181_289_323	0.94	-1.01	1255707lyjaBlhypothetical proteinl-
STM4182_385_419	0.01	13.69	1255708lmetAlhomoserine O-succinyltransferasel+

STM4183_1115_1149	0.91	1.02	1255709laceBlmalate synthasel+
STM4184_434_468	0.07	-1.62	1255710laceAlisocitrate lyasel+
STM4185_1137_1171	0.05	-1.39	1255711laceKlbifunctional isocitrate dehydrogenase kinase/phosphatase proteinl+
STM4186_345_379	0.19	1.29	1255712lSTM4186lputative cytoplasmic proteinl-
STM4187_65_99	0.08	-1.31	1255713lcllRlacetate operon transcriptional repressor lclRI-
STM4188.S_2813_2847	0.10	-1.44	1255714lmetHIB12-dependent methionine synthasel+
STM4189_1113_1147	0.19	1.28	1255715lyjbBllputative transport proteinl+
STM4190_133_167	0.02	-2.20	1255716lpepElpeptidase El-
STM4191_41_75	0.05	1.73	1255717lSTM4191lputative cytoplasmic proteinl+
STM4192_353_387	0.01	-2.39	1255718lSTM4192lputative cytoplasmic proteinl+
STM4193_545_579	0.21	-1.21	1255719lyjbCl23S rRNA pseudouridine synthase Fl+
STM4194_132_166	0.02	1.48	1255720lyjbDlhypothetical proteinl-
STM4195_417_451	0.01	-1.34	1255721lSTM4195lputative Na+-dependent transporterl-
STM4196_549_587	0.02	2.83	1255722lSTM4196lputative cytoplasmic proteinl-
STM4197_109_144	0.07	2.18	1255723lSTM4197lputative inner membrane proteinl-
STM4198_321_355	0.50	1.10	1255724lSTM4198lputative cytoplasmic proteinl-
STM4199_481_515	0.19	-1.13	1255725lSTM4199lputative cytoplasmic proteinl-
STM4202_1077_1111	0.23	-1.23	1255728lSTM4202lputative phage baseplate proteinl-
STM4204_869_903	0.12	1.97	1255730lSTM4204lputative inner membrane proteinl-
STM4205_841_875	0.09	2.10	1255731lSTM4205lputative phage glycosyltransferasel-
STM4206_200_234	0.02	1.26	1255732lSTM4206lputative phage glucose translocasel-
STM4207_369_403	0.04	2.00	1255733lSTM4207lputative phage baseplate componentl-
STM4208_237_271	0.01	1.70	1255734lSTM4208lputative cytoplasmic proteinl-
STM4209_33_67	0.11	-1.18	1255735lSTM4209lputative inner membrane proteinl-
STM4210_481_515	0.02	2.59	1255736lSTM4210lputative methyl-accepting chemotaxis proteinl-
STM4211.1N_193_227	0.20	-1.13	2673741lSTM4211.1NI-I-
STM4213_957_991	0.36	1.08	1255739lSTM4213lputative phage tail sheath proteinl-
STM4216_205_239	0.10	1.55	1255742lSTM4216lputative inner membrane proteinl-
STM4217_312_346	0.08	2.18	1255743lSTM4217lputative soluble lytic murein transglycosylasel-
STM4218_45_79	0.03	1.48	1255744lSTM4218lputative inner membrane proteinl-
STM4219.S_209_243	0.10	1.38	1255745lSTM4219.Slputative cytoplasmic proteinl+
STM4220_1231_1265	0.44	-1.13	1255746llysClaspartate kinase IIIl-
STM4221_1323_1357	0.25	1.23	1255747lpglglucose-6-phosphate isomerasel+
STM4222.S_120_154	0.13	1.75	1255748lyjbElputative outer membrane proteinl+
STM4223_321_355	0.64	-1.05	1255749lyjbFlputative outer membrane lipoproteinl+

STM4224_321_355	0.37	-1.11	1255750lyjbGlputative periplasmic proteinl+
STM4225_1274_1308	0.49	1.14	1255751lyjbHlputative outer membrane lipoproteinl+
STM4226_321_355	0.04	2.36	1255752lyjbAlphosphate-starvation-inducible protein PsiEl+
STM4227_737_771	0.39	1.16	1255753lmalGlmaltose transporter permeasel-
STM4229_1064_1098	0.09	-1.34	1255755lmalElmaltose ABC transporter periplasmic proteinl-
STM4230_975_1009	0.05	2.48	1255756lmalKlmaltose/maltodextrin transporter ATP-binding proteinl+
STM4231_760_794	0.08	-1.24	1255757llamBlmaltoporinl+
STM4232_545_579	0.05	1.10	1255758lmalMlmaltose regulon periplasmic proteinl+
STM4233_193_227	0.01	1.91	1255759lubiClchlorismate pyruvate lyasel+
STM4234_33_67	0.02	1.25	1255760lubiAl4-hydroxybenzoate octaprenyltransferasel+
STM4235_2254_2288	0.00	-1.98	1255761lplsBlglycerol-3-phosphate acyltransferasel-
STM4236_278_312	0.05	-1.51	1255762ldgkAldiacylglycerol kinasel+
STM4237_283_317	0.10	1.26	1255763llexAlLexA repressorl+
STM4238_1031_1065	0.95	1.01	1255764ldinFIDNA-damage-inducible SOS response proteinl+
STM4239_73_107	0.03	1.43	1255765ISTM4239lputative cytoplasmic proteinl+
STM4240_129_163	0.10	1.49	1255766lyjbJlputative stress-response proteinl+
STM4241_113_147	0.03	1.43	1255767lzurlzinc uptake transcriptional repressorl-
STM4243_705_739	0.24	-1.22	1255769lyjbNltRNA-dihydrouridine synthase Al+
STM4244_121_155	0.01	1.76	1255770lpspGlpophage shock protein Gl+
STM4245_265_299	0.12	-1.07	1255771lqorlquinone oxidoreductase NADPH-dependentl-
STM4246_1313_1347	0.03	-1.81	1255772ldnaBlreplicative DNA helicasel+
STM4247_849_883	0.02	-2.07	1255773lalrlalanine racemasel+
STM4248_611_645	0.05	-2.22	1255774ltyrBlaromatic amino acid aminotransferasel+
STM4249_577_611	0.01	-1.72	1255775laphAlacid phosphatase/phosphotransferasel+
STM4250_369_403	0.03	1.45	1255776lyjbQlputative cytoplasmic proteinl+
STM4251_257_291	0.30	1.19	1255777lyjbRlputative cytoplasmic proteinl+
STM4252_281_315	0.15	1.26	1255778ISTM4252lputative inner membrane proteinl-
STM4254_2659_2693	0.98	1.01	1255780luvrAlexcinuclease ABC subunit Al-
STM4255_33_67	0.78	-1.08	1255781ISTM4255lputative cytoplasmic proteinl+
STM4256_226_260	0.23	1.24	1255782lssblsingle-strand DNA-binding proteinl+
STM4257_273_307	0.06	3.22	1255783ISTM4257lhypothetical proteinl+
STM4258_506_540	0.06	2.50	1255784ISTM4258lputative methyl-accepting chemotaxis proteinl+
STM4259_753_787	0.02	3.05	1255785ISTM4259lputative ABC exporter outer membrane componentl+
STM4260_1199_1233	0.82	1.15	1255786ISTM4260lpredicted cation efflux pumpl+
STM4261_7001_7035	0.16	-1.29	1255787ISTM4261lputative inner membrane proteinl+
STM4262_1948_1982	0.01	2.20	1255788ISTM4262lputative ABC-type bacteriocin/lantibiotic exporterl+

STM4263_177_211	0.00	12.42	1255789lyjcB putative inner membrane proteinl-
STM4264_1467_1501	0.30	-1.09	1255790lyjcC putative diguanylate cyclase/phosphodiesterasel+
STM4265_113_147	0.16	1.47	1255791lsoxSIDNA-binding transcriptional dual regulatorl-
STM4266_289_323	0.02	3.22	1255792lsoxR redox-sensing transcriptional activatorl+
STM4267_145_179	0.50	-1.11	1255793lSTM4267l putative glutathione S-transferasel+
STM4268_735_769	0.01	-3.26	1255794lyjcD hypothetical proteinl+
STM4269_1416_1450	0.02	1.34	1255795lyjcE Na/H transport proteinl+
STM4270_161_195	0.20	1.16	1255796lSTM4270l putative transcriptional regulatorl-
STM4271_297_331	0.05	-1.37	1255797lSTM4271l putative inner membrane proteinl+
STM4273_763_797	0.01	-7.54	1255799lactPlacetate permeasel-
STM4274_73_107	0.00	-8.67	1255800lyjcH putative inner membrane proteinl-
STM4275_1376_1410	0.00	-46.59	1255801lacslacetyl-CoA synthetasel-
STM4276_45_83	0.17	1.27	1255802lSTM4276l putative cytoplasmic proteinl+
STM4277_1142_1176	0.23	1.10	1255803lnrfAlcytochrome c nitrite reductasel+
STM4279_545_579	0.33	1.15	1255805lnrfC putative formate-dependent nitrite reductasel+
STM4280_441_475	0.29	-1.14	1255806lnrfD putative formate-dependent nitrate reductasel+
STM4281_2008_2042	0.10	1.17	1255807lnrfE formate-dependent nitrite reductasel+
STM4282_369_403	0.47	1.14	1255808lnrfG formate-dependent nitrite reductase complex subunit NrfGl+
STM4284_513_547	0.33	1.53	1255810lyjcOltetrastricopeptide repeat proteinl-
STM4285_1597_1631	0.05	1.28	1255811lfdhFl formate dehydrogenasel-
STM4286_129_163	0.05	1.20	1255812llpxOl putative dioxygenasel-
STM4287.S_9_43	0.01	2.65	1255813lphnOlaminoalkylphosphonic acid N-acetyltransferasel-
STM4288_129_163	0.94	-1.01	1255814lphnBl hypothetical proteinl-
STM4289_119_153	0.42	1.10	1255815lphnAl hypothetical proteinl-
STM4290_840_874	0.06	1.69	1255816lproPl proline/glycine betaine transporterl+
STM4291_376_410	0.00	1.59	1255817lbasSl sensor protein BasS/PmrBl-
STM4292_385_419	0.01	1.96	1255818lbasRIDNA-binding response regulator in two-component regulatory system with BasSl-
STM4293_1349_1383	0.04	1.93	1255819lyjdBl predicted metal dependent hydrolasel-
STM4294_531_565	0.09	1.14	1255820lyjdEl arginine:agmatine antiporterl-
STM4295_257_291	0.01	3.10	1255821ladiYl transcriptional activatorl-
STM4297_577_611	0.91	1.04	1255823lmeRIDNA-binding transcriptional dual regulatorl-
STM4299_568_602	0.03	1.35	1255825lmeBl melibiose:sodium symporterl+
STM4300_1072_1106	0.02	-1.85	1255826lfumBl fumarate Bl-
STM4301_1142_1176	0.01	-1.54	1255827ldcuBl aerobic C4-dicarboxylate transporterl-
STM4302_9_43	0.27	-1.30	1255828lSTM4302l putative cytoplasmic proteinl-

STM4304_1369_1403	0.00	-3.70	1255830ldcuSlsensory histidine kinase DcuSl-
STM4305.S_2055_2089	0.01	-3.00	1255831lSTM4305.Slputative anaerobic dimethylsulfoxide reductase subunit Al+
STM4306_513_547	0.25	-1.36	1255832lSTM4306lputative anaerobic dimethylsulfoxide reductase subunit Bl+
STM4307_105_139	0.06	-1.24	1255833lSTM4307lputative anaerobic dimethylsulfoxide reductase subunit Cl+
STM4308_390_424	0.03	-1.61	1255834lSTM4308lputative anaerobic dehydrogenase componentl+
STM4309_850_884	0.02	1.29	1255835lSTM4309lhypothetical proteinl-
STM4310_641_675	0.06	-2.09	1255836lSTM4310lputative inner membrane proteinl+
STM4312_49_83	0.02	2.12	1255838lSTM4312lhypothetical proteinl-
STM4313_81_115	0.03	1.41	1255839lSTM4313lputative cytoplasmic proteinl-
STM4314_119_153	0.08	1.90	1255840lSTM4314lputative regulatory proteinl-
STM4316_51_85	0.16	1.24	1255842lSTM4316lputative cytoplasmic proteinl-
STM4317_153_187	0.07	1.25	1255843lSTM4317lhypothetical proteinl+
STM4318_145_179	0.01	1.67	1255844lSTM4318lputative acetyltransferasel+
STM4319_457_491	0.00	4.54	1255845lphoNlnon-specific acid phosphatasesl-
STM4320_41_75	0.73	1.03	1255846lSTM4320lputative regulatory proteinl+
STM4322_513_547	0.48	1.09	1255848lyjdClputative transcriptional regulatorl-
STM4324_247_281	0.03	1.27	1255850lcutfAldivalent-cation tolerance protein CutAl-
STM4325_911_945	0.13	-1.71	1255851ldcuAlanaerobic C4-dicarboxylate transporterl-
STM4326_1078_1112	0.00	-4.14	1255852laspAlaspartate ammonia-lyasel-
STM4327_49_83	0.26	1.24	1255853lfxsAlFxsAl+
STM4328_883_917	0.03	3.34	1255854lyjeHlinner membrane protein YjeHl-
STM4329_49_83	0.17	1.24	1255855lgroESlco-chaperonin GroESl+
STM4330_760_794	0.29	1.42	1255856lgroELlchaperonin GroELl+
STM4331_146_180	0.22	-1.11	1255857lyjellputative outer membrane lipoproteinl+
STM4332_353_387	0.78	-1.02	1255858lyjeJlputative inner membrane proteinl-
STM4333_366_400	0.01	1.24	1255859lyjeKlputative aminomutasel-
STM4334_513_547	0.01	-2.19	1255860lefplelongation factor Pl+
STM4335_41_75	0.02	-1.63	1255861lecnAlputative entericidin A precursorl+
STM4337_257_291	0.02	1.41	1255863lecnRlputative regulatory proteinl-
STM4338_257_291	0.07	1.28	1255864lsugElquaternary ammonium compound-resistance protein SugEl+
STM4339_401_435	0.08	1.49	1255865lblclouter membrane lipoprotein Blcl-
STM4340_291_325	0.00	-3.79	1255866lfrdDlfumarate reductase subunit Di-
STM4341_359_393	0.00	-11.56	1255867lfrdClfumarate reductase subunit Cl-
STM4342_193_227	0.00	-6.59	1255868lfrdBlfumarate reductase iron-sulfur subunitl-
STM4343_984_1018	0.00	-3.99	1255869lfrdAlfumarate reductase flavoprotein subunitl-

STM4344_417_451	0.01	-2.37	1255870lyjeAllysyl-tRNA synthetasel+
STM4345_672_706	0.07	1.31	1255871lyjeMlputative amino-acid transport proteinl+
STM4346_87_121	0.07	-1.27	1255872lyjeOlputative inner membrane proteinl+
STM4347_2584_2618	0.45	-1.07	1255873lyjePlpredicted mechanosensitive channell-
STM4348_449_483	0.01	-1.28	1255874lpsdlphosphatidylserine decarboxylasel-
STM4349_182_216	0.05	-1.35	1255875lyjeQlribosome-associated GTPasel-
STM4350_209_243	0.10	-1.59	1255876lornloligoribonucleasel+
STM4351_257_291	0.02	1.49	1255877lSTM4351lputative arginine-binding periplasmic proteinl-
STM4355.S_461_495	0.17	1.18	1255881lyjeSlputative FeS proteinl-
STM4356_1061_1095	0.01	-1.20	1255882lyjeFlhypothetical proteinl+
STM4357_417_451	0.00	-1.35	1255883lyjeElputative ATPasel+
STM4358_1121_1155	0.05	-1.64	1255884lamiBIN-acetylmuramoyl-l-alanine amidase III+
STM4359_1306_1340	0.43	1.05	1255885lmutLlDNA mismatch repair proteinl+
STM4360_801_835	0.27	-1.12	1255886lmiaAltRNA delta(2)-isopentenylpyrophosphate transferasel+
STM4361_165_199	0.18	1.10	1255887lhfqIRNA-binding protein Hfql+
STM4362_474_508	0.13	-1.09	1255888lhflXlputative GTPase HfIXl+
STM4363_581_615	0.04	-1.44	1255889lhflKlFtsH protease regulator HfIKl+
STM4364_934_968	0.18	1.26	1255890lhflClFtsH protease regulator HfICl+
STM4365_153_187	0.08	1.87	1255891lyjeTlputative inner membrane proteinl+
STM4366_876_910	0.40	-1.15	1255892lpurAladenylosuccinate synthetasel+
STM4367_353_387	0.02	1.33	1255893lyjeBltranscriptional repressor NsrRl+
STM4368_2144_2178	0.01	1.83	1255894lvacBlexoribonuclease Rl+
STM4369_193_227	0.02	1.53	1255895lyjfHl23S rRNA (guanosine-2'-O)-methyltransferasel+
STM4370_241_275	0.17	1.25	1255896lyjfllputative cytoplasmic proteinl+
STM4372_936_970	0.20	1.11	1255898lSTM4372lputative potassium channelsl+
STM4374_184_218	0.04	2.22	1255900lyjfLlputative inner membrane proteinl+
STM4375_209_243	0.37	1.34	1255901lyjfMlputative inner membrane proteinl+
STM4376_357_391	0.08	-1.26	1255902lyjfClputative glutathionylspermidine synthasel+
STM4377_1426_1460	0.00	-4.74	1255903laidBlisovaleryl CoA dehydrogenasel+
STM4378_153_187	0.00	-3.80	1255904lyjfNlputative inner membrane proteinl-
STM4379_9_43	0.05	-1.77	1255905lyjfOlputative lipoproteinl-
STM4380_641_675	0.04	1.74	1255906lyjfPlpredicted hydrolasel+
STM4381_273_307	0.09	1.24	1255907lyjfQlputative transcriptional repressorl-
STM4382_930_964	0.37	-1.10	1255908lyjfRlputative L-ascorbate 6-phosphate lactonasel-
STM4384_161_195	0.98	1.01	1255910lsgaBIL-ascorbate-specific enzyme IIB component of PTSI+
STM4386_321_355	0.44	1.08	1255912lulaDI3-keto-L-gulonate-6-phosphate decarboxylasel+

STM4387_609_643	0.30	1.13	1255913lsgaUll-xylulose 5-phosphate 3-epimerasel+
STM4388_593_627	0.02	1.90	1255914lsgaEIL-ribulose-5-phosphate 4-epimerasel+
STM4389_115_149	0.01	1.87	1255915lyjfYlputative outer membrane proteinl-
STM4391_41_75	0.01	-2.89	1255917lrpsFI30S ribosomal protein S6l+
STM4392_65_99	0.01	-3.55	1255918lpriBlpribosomal replication protein Nl+
STM4393_105_139	0.01	-3.43	1255919lrpsRI30S ribosomal protein S18l+
STM4394_129_163	0.02	-2.89	1255920lrpIII50S ribosomal protein L9l+
STM4395_337_371	0.22	-1.38	1255921lyifZlputative permeasel+
STM4396_41_75	0.77	1.02	1255922lytfBlputative cell envelope opacity-associated protein Al-
STM4397_17_51	0.05	-1.65	1255923lfkLBlpertidyl-prolyl cis-trans isomerasel+
STM4398_667_701	0.06	-1.57	1255924lcycAID-alanine/D-serine/glycine permeasel+
STM4401_389_423	0.12	1.91	1255927lytfGIputative reductasel-
STM4402_225_259	0.44	-1.26	1255928lytfHlputative transcriptional regulatorl+
STM4403_1297_1331	0.07	-1.17	1255929lcpdBlbifunctional 2' 3'-cyclic nucleotide 2'-phosphodiesterase/3'-nucleotidase periplasmic precursor proteinl-
STM4404_513_547	0.01	1.87	1255930lcysQlPAPS (adenosine 3'-phosphate 5'-phosphosulfate) 3'(2') 5'-bisphosphate nucleotidasel+
STM4405_321_355	0.45	-1.20	1255931lytfJlputative transcriptional regulatorl-
STM4406.S_57_91	0.00	-1.63	1255932lytfKlputative cytoplasmic proteinl+
STM4407_665_699	0.04	1.83	1255933lytfLlputative hemolysin-like proteinl-
STM4408_225_259	0.01	2.72	1255934lmsrAlmethionine sulfoxide reductase Al-
STM4409_1295_1329	0.36	1.07	1255935lytfMlputative outer membrane proteinl+
STM4410_3549_3583	0.16	-1.13	1255936lytfNlputative periplasmic proteinl+
STM4411_257_291	0.41	-1.09	1255937lytfPlputative cytoplasmic proteinl+
STM4412_770_804	0.02	1.49	1255938lSTM4412lputative permeasel-
STM4413_421_455	0.00	3.10	1255939lSTM4413lputative metallo-dependent hydrolasel-
STM4414_65_99	0.19	-1.33	1255940lppalnorganic pyrophosphatasel-
STM4415_689_723	0.41	-1.13	1255941lfbplfructose-1 6-bisphosphatasel-
STM4416_829_863	0.64	1.08	1255942lmpIIUDP-N-acetylmuramate/L-alanyl-gamma-D-glutamyl-meso-diaminopimelate ligasel+
STM4417_417_451	0.30	1.08	1255943lSTM4417lputative transcriptional regulatorl+
STM4418_835_869	0.19	-1.19	1255944lSTM4418lsugar transporterl-
STM4419_1014_1048	0.62	-1.10	1255945lSTM4419lsugar transporterl+
STM4421_1405_1439	0.01	-2.12	1255947lSTM4421lputative NAD-dependent aldehyde dehydrogenasel-
STM4425_12_46	0.05	1.24	1255951lSTM4425lputative dehydrogenasel+
STM4426_505_539	0.01	2.72	1255952lsrfJlysosomal glucosyl ceramidase-like proteinl+

STM4427_513_547	0.02	1.41	1255953lSTM4427lputative endonucleasel+
STM4429_754_788	0.29	1.30	1255955lSTM4429l-I-
STM4431_1396_1430	0.15	1.09	2673766lSTM4431l-I+
STM4433_760_794	0.00	1.98	1255959lSTM4433lmyo-inositol 2-dehydrogenasel+
STM4434_900_934	0.63	-1.07	1255960lSTM4434lputative permeasel+
STM4435_317_351	0.28	1.18	1255961lSTM4435lputative cytoplasmic proteinl+
STM4436_289_323	0.01	-1.38	1255962lSTM4436lputative endonucleasel+
STM4437_425_459	0.02	1.73	1255963lyjgAlhypothetical proteinl-
STM4438_386_420	0.02	1.67	1255964lpmbAlpeptidase PmbAl+
STM4439_249_283	0.04	-1.34	1255965lcybClcytochrome b562l+
STM4440_33_67	0.02	-1.41	1255966lSTM4440lputative cytoplasmic proteinl+
STM4441_225_259	0.69	-1.04	1255967lSTM4441lputative cytoplasmic proteinl+
STM4442_241_275	0.24	1.24	1255968lSTM4442lputative cytoplasmic proteinl+
STM4444_97_131	0.10	-1.25	1255970lSTM4444lputative inner membrane proteinl+
STM4445_839_873	0.14	-1.16	1255971lSTM4445ldihydroorotasel+
STM4446_684_718	0.13	1.30	1255972lSTM4446lputative selenocysteine synthasel+
STM4447_497_531	0.02	-1.30	1255973lSTM4447lputative periplasmic proteinl+
STM4448_1619_1653	0.30	1.11	1255974lSTM4448lputative phosphotransferase system mannitol/fructose-specific IIA domainl+
STM4449_88_122	0.00	-1.44	1255975lSTM4449lbifunctional antitoxin/transcriptional repressor RelBl+
STM4450_160_194	0.00	-1.31	1255976lSTM4450lputative inner membrane proteinl+
STM4451_429_463	0.41	1.15	1255977lnrdGlanaerobic ribonucleotide reductase-activating proteinl-
STM4452_1908_1942	0.06	-1.58	1255978lnrdDlanaerobic ribonucleoside triphosphate reductasel-
STM4452.1N_60_94	0.08	2.45	2673768lSTM4452.1Nhypothetical proteinl+
STM4454_739_773	0.02	-2.64	1255980ltreBlpseudol-
STM4455_481_515	0.12	1.28	1255981ltreRltrehalose repressorl-
STM4457_281_315	0.03	1.79	1255983lSTM4457lputative transposasel-
STM4458_65_99	0.09	-1.75	1255984lyjgFlputative translation initiation inhibitorl-
STM4459_33_67	0.01	2.00	1255985lpyrlaspartate carbamoyltransferase regulatory subunitl-
STM4460_586_620	0.48	-1.20	1255986lpyrBlaspartate carbamoyltransferase catalytic subunitl-
STM4461_50_84	0.01	2.14	1255987lpyrLlpyrBl operon leader peptidel-
STM4464_533_567	0.78	-1.07	1255990lSTM4464lputative arginine repressorl-
STM4465_54_88	0.04	2.69	1255991lSTM4465lornithine carbamoyltransferasel-
STM4468_89_123	0.01	-1.64	1255994lyjgKlputative cytoplasmic proteinl+
STM4469_438_472	0.34	-1.07	1255995largllornithine carbamoyltransferase subunit II-
STM4470_81_115	0.02	1.35	1255996lyjgDlhypothetical proteinl+

STM4471_513_547	0.44	-1.10	1255997lmiaElhydroxylasel+
STM4472_267_306	0.00	2.18	1255998lytgAlputative inner membrane proteinl-
STM4473_55_89	0.00	2.15	1255999lyjgMlputative acetyltransferasel-
STM4474_717_751	0.04	1.39	1256000lyjgNlputative inner membrane proteinl+
STM4475_2273_2307	0.35	-1.14	1256001lvalSlvalyl-tRNA synthetasel-
STM4476.S_9_43	0.32	1.09	1256002lholtDNA polymerase III subunit chil-
STM4477_545_579	0.02	-1.26	1256003lpepAlleucyl aminopeptidasel-
STM4478_85_119	0.34	-1.15	1256004lSTM4478lputative cytoplasmic proteinl-
STM4479_998_1032	0.29	1.20	1256005lyjgPlputative permeasel+
STM4480_516_550	0.04	-1.32	1256006lyjgQlputative permeasel+
STM4482_977_1011	0.01	-2.95	1256008lidnTIL-idonate transport proteinl-
STM4483_289_323	0.45	-1.08	1256009lidnOgluconate 5-dehydrogenasel-
STM4484_241_275	0.01	-1.61	1256010lidnDIL-idonate 5-dehydrogenase NAD-bindingl-
STM4486_853_887	0.01	-2.68	1256012lyjgBlputative alcohol dehydrogenasel-
STM4487_21_55	0.46	-1.41	1256013lleuXlRNAI+
STM4488_97_131	0.01	2.43	1256014lSTM4488lputative integrasel+
STM4489_3381_3415	0.07	-1.51	1256015lSTM4489lputative DNA helicasesl+
STM4490_321_355	0.08	-1.36	1256016lSTM4490lputative restriction endonucleasel+
STM4491_2046_2080	0.65	-1.05	1256017lSTM4491lputative ATP-dependent Lon proteasel-
STM4492_2319_2353	0.63	1.04	1256018lSTM4492lputative cytoplasmic proteinl-
STM4493_273_307	0.09	-1.18	1256019lSTM4493lputative cytoplasmic proteinl-
STM4494_797_831	0.04	-1.54	1256020lSTM4494lputative ABC-type sugar/spermidine/putrescine transport system ATPase componentl-
STM4495_2951_2985	0.52	-1.28	1256021lSTM4495lputative type II restriction enzyme methylase subunitl-
STM4496_2675_2709	0.03	-1.66	1256022lSTM4496lputative DNA repair ATPasel-
STM4497_228_262	0.05	2.01	1256023lSTM4497lputative cytoplasmic proteinl-
STM4498_161_195	0.48	-1.11	1256024lSTM4498lputative inner membrane proteinl-
STM4498.1N_2_36	0.83	-1.01	2673776lSTM4498.1Nl-I+
STM4499_257_291	0.05	1.15	1256025lyeeNlhypothetical proteinl-
STM4500_1049_1083	0.87	-1.02	1256026lyjhPlputative SAM-dependent methyltransferasel-
STM4502_569_603	0.02	2.55	1256028lSTM4502lputative cytoplasmic proteinl+
STM4503_249_283	0.02	1.34	1256029lSTM4503lputative inner membrane proteinl+
STM4504_353_387	0.00	3.26	1256030lSTM4504lputative cytoplasmic proteinl+
STM4505_385_419	0.03	2.09	1256031lSTM4505lhypothetical proteinl+
STM4506_257_291	0.27	1.30	1256032lSTM4506lputative dienelactone hydrolasel-
STM4507_209_243	0.00	-1.73	1256033luxuRIDNA-binding transcriptional repressorl+

STM4509.S_229_263	0.36	-1.10	1256035lSTM4509.lputative cytoplasmic proteinl+
STM4510_177_211	0.00	-1.74	1256036lSTM4510lputative aspartate racemasel+
STM4511_833_867	0.09	-1.42	1256037lyjiElputative DNA-binding transcriptional regulatorl-
STM4512_750_784	0.01	-1.62	1256038liadAlisoaspartyl dipeptidasel-
STM4513_129_163	0.09	1.35	1256039lyjiGlhypothetical proteinl-
STM4514.S_547_581	0.13	-1.25	1256040lyjiHlputative inner membrane proteinl-
STM4517_1171_1205	0.45	1.23	1256043lyjiOlputative transport proteinl-
STM4518_257_291	0.17	1.18	1256044lSTM4518lputative inner membrane proteinl+
STM4519_1028_1062	0.01	-2.25	1256045lSTM4519lputative NAD-dependent aldehyde dehydrogenasel+
STM4520_15_49	0.29	1.31	1256046lSTM4520lputative cytoplasmic proteinl-
STM4521_97_131	0.12	1.73	1256047lyjiSlputative cytoplasmic proteinl+
STM4522_91_128	0.01	2.86	1256048lSTM4522lputative inner membrane proteinl-
STM4523_65_99	0.00	1.94	1256049lyjiWlputative SOS response proteinl-
STM4524_563_597	0.05	1.99	1256050lhsdSltype I restriction enzyme specificity proteinl-
STM4525_1207_1241	0.01	1.61	1256051lhsdMIDNA methylase MI-
STM4527_593_627	0.03	-1.26	1256053lmrrlrestriction endonucleasel+
STM4528_217_251	0.02	2.13	1256054lSTM4528lputative inner membrane proteinl+
STM4529_233_267	0.58	1.08	1256055lSTM4529lputative cytoplasmic proteinl+
STM4530_337_371	0.17	1.20	1256056lyjiAlputative GTP-binding protein YjiAl-
STM4531_103_137	0.79	1.11	1256057lyjiXlputative cytoplasmic proteinl-
STM4532_1152_1186	1.00	-1.00	1256058lyjiYlputative carbon starvation proteinl-
STM4533_1263_1297	0.01	-2.31	1256059ltsrlmethyl-accepting chemotaxis protein II+
STM4534_2223_2257	0.00	-3.84	1256060lSTM4534lputative transcriptional regulatorl+
STM4535_309_343	0.16	1.87	1256061lSTM4535lputative PTS permeasel+
STM4538_705_739	0.05	2.01	1256064lSTM4538lputative PTS permeasel+
STM4539_575_609	0.01	-3.09	1256065lSTM4539lputative glucosamine-fructose-6-phosphate aminotransferasel+
STM4540.S_460_494	0.79	1.04	1256066lSTM4540.lputative glucosamine-fructose-6-phosphate aminotransferasel+
STM4541_1741_1775	0.75	-1.04	1256067lmdoBlphosphoglycerol transferase II-
STM4542_357_391	0.01	2.07	1256068lyjjAlhypothetical proteinl-
STM4543_257_291	0.54	1.09	1256069ldnaCIDNA replication protein DnaCl-
STM4544_177_211	0.02	1.54	1256070ldnaTlprimosomal protein II-
STM4545_225_259	0.19	-1.16	1256071lSTM4545lhypothetical proteinl-
STM4546_385_419	0.01	1.48	1256072lyjjPlhypothetical proteinl-
STM4547_577_611	0.31	1.18	1256073lyjjQlputative transcriptional regulatorl+

STM4549_409_443	0.52	1.11	1256075 STM4549 putative cytoplasmic proteinl-
STM4550_17_51	0.48	-1.18	1256076 fhuF ferric iron reductase involved in ferric hydroximate transportl-
STM4551_898_932	0.27	1.06	1256077 STM4551 hypothetical proteinl-
STM4552_43_77	0.33	1.06	1256078 STM4552 putative inner membrane proteinl+
STM4556_742_776	0.26	-1.15	1256082 rsmC 16S ribosomal RNA m2G1207 methyltransferasel-
STM4557_249_283	0.05	1.44	1256083 holoIDNA polymerase III subunit psil+
STM4558_193_227	0.00	-1.46	1256084 rimII ribosomal-protein-alanine N-acetyltransferasel+
STM4559.S_129_163	0.01	-1.74	1256085 yjjG nucleotidasel+
STM4560_1103_1137	0.13	-1.29	1256086 prfC peptide chain release factor 3l+
STM4561_385_419	0.05	1.71	1256087 osmY periplasmic proteinl+
STM4562_43_77	0.04	1.59	1256088 STM4562 putative inner membrane proteinl+
STM4563_523_557	0.12	1.26	1256089 yjjU putative phosphoesterasel+
STM4564_737_771	0.57	1.07	1256090 yjjV putative deoxyribonuclease YjjVI+
STM4565_649_683	0.02	-1.54	1256091 yjjW pyruvate formate lyase-activating enzymel-
STM4566_1020_1054	0.02	-1.56	1256092 yjll hypothetical proteinl-
STM4567_225_259	0.01	1.31	1256093 deoC deoxyribose-phosphate aldolasel+
STM4568_580_614	0.08	-1.23	1256094 deoA thymidine phosphorylasel+
STM4569_1089_1123	0.51	-1.13	1256095 deoB phosphopentomutasel+
STM4570_129_163	0.70	1.08	1256096 deoD purine nucleoside phosphorylasel+
STM4572_2170_2204	0.07	3.04	1256098 lstjB putative fimbrial usher proteinl-
STM4573_321_355	0.02	3.01	1256099 lstjC putative periplasmic chaperone proteinl-
STM4575_173_207	1.00	-1.00	1256101 STM4575 putative outer membrane proteinl-
STM4576_562_596	0.01	1.88	1256102 lplA lipopeptide-protein ligase A l-
STM4577_265_299	0.03	2.26	1256103 smpl hypothetical proteinl-
STM4579_704_738	0.48	1.08	1256105 radA DNA repair protein RadAl+
STM4580.S_538_572	0.01	-1.46	1256106 nadR nicotinamide-nucleotide adenylyltransferasel+
STM4581_1629_1663	0.33	-1.30	1256107 yjjK putative ABC transporter ATP-binding proteinl-
STM4582_1851_1885	0.06	-1.35	1256108 sltI lytic murein transglycosylasel+
STM4583_277_311	0.02	-1.90	1256109 trpR Trp operon repressorl+
STM4584_209_243	0.01	-1.93	1256110 yjjX INTPasel-
STM4585_513_547	0.01	-1.69	1256111 gpmB phosphoglycerate mutasel+
STM4586_801_835	0.00	2.07	1256112 rolB transcriptional regulatorl-
STM4587_215_249	0.18	1.10	1256113 creA hypothetical proteinl+
STM4588_145_179	0.61	-1.06	1256114 creB DNA-binding response regulator CreBl+
STM4589_1210_1244	0.63	1.11	1256115 creC sensory histidine kinase CreCl+
STM4590_863_897	0.13	-1.19	1256116 creD hypothetical proteinl+

STM4591_631_665	0.51	1.11	1256117 sthElputative major fimbrial subunitl-
STM4592_33_67	0.19	1.16	1256118 sthDlputative fimbrial subunitl-
STM4593_1731_1765	0.08	1.60	1256119 sthBlputative fimbrial usher proteinl-
STM4594_641_675	0.09	1.71	1256120 sthAlputative fimbrial chaparonel-
STM4595_97_131	0.03	1.43	1256121 STM4595lputative fimbrial chaparonel-
STM4596_209_243	0.03	-1.25	1256122 STM4596lputative inner membrane proteinl-
STM4597_197_231	0.01	3.09	1256123 STM4597lputative periplasmic proteinl-
STM4598_65_99	0.02	-2.17	1256124 arcAIDNA-binding response regulator in two-component regulatory system with ArcB or CpxA l-
STM4599_49_83	0.47	1.16	1256125 yjjYlputative inner membrane proteinl+
STM4600_257_291	0.09	1.33	1256126 lasTlputative tRNA/tRNA methyltransferasel+
PSLT001_2_36	0.25	1.14	1256238 PSLT001lputative cytoplasmic proteinl+
PSLT002_100_134	0.69	1.06	1256237 PSLT002lputative phospholipase Dl+
PSLT003_22_59	0.48	1.07	1256235 repC1DNA replication proteinl+
PSLT004_56_90	0.24	1.21	1256236 repA31DNA replication proteinl+
PSLT005_20_55	0.24	-1.11	1256234 taplplasmid replication control proteinl+
PSLT006_627_661	0.01	-1.47	1256233 repA1DNA replication proteinl+
PSLT007_72_106	0.09	1.45	1256232 PSLT007lputative outer membrane proteinl+
PSLT008_338_372	0.11	1.45	1256231 srgClputative regulatory proteinl-
PSLT009_477_511	0.24	1.41	1256230 rcKlresistance to complement killingl-
PSLT011_527_561	0.10	1.20	1256229 srgAlputative thiol-disulfide isomerase or thioredoxinl-
PSLT012_54_88	0.80	1.04	1256227 orf7lputative bacterial regulatory proteinl-
PSLT013_178_212	0.35	-1.18	1256226 pefIIregulatorl-
PSLT014_525_559	0.14	1.16	1256224 orf6lputative outer membrane proteinl-
PSLT017_1655_1689	0.18	-1.23	1256222 pefClusher proteinl-
PSLT018_51_85	0.11	-1.41	1256221 pefAlmajor fimbrial subunitl-
PSLT020_73_107	0.02	3.44	1256220 PSLT020l-l+
PSLT020.1N_129_163	0.71	-1.12	1256218 PSLT020.1NI-l+
PSLT023_813_847	0.03	1.28	1256216 repA21DNA replication proteinl-
PSLT024_208_246	0.51	1.26	1256217 PSLT024lhypothetical proteinl+
PSLT025_152_189	0.06	1.27	1256215 PSLT025lputative cytoplasmic proteinl-
PSLT026_408_443	0.02	2.35	1256213 PSLT026lputative periplasmic proteinl-
PSLT027_56_90	0.20	-1.22	1256214 ccdBAlantidotel+
PSLT028_14_48	0.05	1.55	1256209 ccdB1toxinl+
PSLT029_154_188	0.04	-1.36	1256212 PSLT029lputative cytoplasmic proteinl+
PSLT030_451_485	0.16	1.18	1256211 PSLT030lputative cytoplasmic proteinl+

PSLT031_371_405	0.05	-1.30	1256210 rsdB resolvase +
PSLT032_38_73	0.17	1.25	1256207 PSLT032 putative diguanylate cyclase/phosphodiesterase +
PSLT032.1N_209_243	0.02	1.41	1256208 PSLT032.1N hypothetical protein +
PSLT033_4_38	0.07	1.51	1256205 PSLT033 putative inner membrane protein +
PSLT034_956_991	0.42	1.14	1256206 PSLT034 I-+
PSLT035_239_273	0.14	1.32	1256204 PSLT035 I-
PSLT036_202_236	0.01	1.92	1256203 PSLT036 putative transposase +
PSLT037_292_327	0.10	1.50	1256202 spvD hydrophilic protein -
PSLT039_1860_1894	0.02	1.57	1256199 spvB hydrophilic protein -
PSLT040_3_37	0.02	3.02	1256200 spvA outer membrane protein -
PSLT040.1N_117_151	0.02	1.72	1256198 PSLT040.1N I-
PSLT041_831_865	0.01	1.95	1256197 spvR regulator of spv operon -
PSLT042_857_891	0.57	1.12	1256195 PSLT042 putative integrase protein +
PSLT043_161_195	0.02	1.36	1256196 PSLT043 type II secretion system protein -
PSLT044_848_882	0.01	1.53	1256194 rlgA putative integrase protein -
PSLT045_312_346	0.10	1.33	1256192 PSLT045 putative resolvase -
PSLT046_413_447	0.01	2.36	1256193 PSLT046 putative carbonic anhydrase -
PSLT047_335_369	0.07	-1.25	1256191 PSLT047 putative cytoplasmic protein -
PSLT048_687_721	0.73	-1.05	1256190 tlpA alpha-helical coiled-coil protein +
PSLT049_53_87	0.29	1.32	1256189 PSLT049 I-+
PSLT050.1N_39_73	0.05	-1.66	1256187 PSLT050.1N hypothetical protein +
PSLT050.2N_361_395	0.48	-1.17	1256188 PSLT050.2N hypothetical protein +
PSLT051_107_141	0.71	1.03	1256185 PSLT051 putative cytoplasmic protein -
PSLT052_577_611	0.20	-1.12	1256186 parA plasmid partition protein A +
PSLT053_310_344	0.08	-1.72	1256184 parB plasmid partition protein B +
PSLT054_456_490	0.04	2.05	1256183 umuC DNA polymerase V subunit UmuC -
PSLT055_259_293	0.01	1.72	1256182 samA SamA -
PSLT056_403_437	0.18	-1.32	1256180 PSLT056 putative cytoplasmic protein +
PSLT057_247_281	0.81	-1.06	1256181 PSLT057 putative cytoplasmic protein +
PSLT058_145_179	0.58	1.09	1256179 PSLT058 I-+
PSLT059_470_504	0.67	-1.06	1256178 PSLT059 putative adenine-specific DNA methylase +
PSLT060_98_132	0.14	-1.33	1256177 PSLT060 putative cytoplasmic protein +
PSLT060.1N_93_127	0.01	-1.60	1256175 PSLT060.1N hypothetical protein +
PSLT062_207_241	0.02	1.32	1256173 PSLT062 putative cytoplasmic protein +
PSLT063_304_338	0.13	1.41	1256174 PSLT063 putative cytoplasmic protein +
PSLT064_42_76	0.20	-1.08	1256172 PSLT064 putative inner membrane protein +

PSLT065_493_527	0.09	1.63	1256171 PSLT065 I-
PSLT066_151_185	0.31	1.12	1256170 ssbB single-strand DNA binding proteinl+
PSLT067_7_41	0.57	-1.06	1256168 PSLT067 putative cytoplasmic proteinl+
PSLT069_372_407	0.10	1.15	1256167 psiB PsiB +
PSLT070_608_643	0.04	1.44	1256166 psiA PsiA +
PSLT071_321_355	0.01	1.54	1256165 PSLT071 I-+
PSLT072_23_57	0.28	-1.20	1256164 PSLT072 putative transglycosylasel-
PSLT073_111_145	0.92	-1.01	1256163 traM mating signal proteinl+
PSLT075_180_214	0.64	-1.32	1256127 traJ regulatory proteinl+
PSLT074_58_92	0.14	-1.18	1256162 finP misc_RNA -
PSLT077_208_242	0.06	1.28	1256159 traAl pilus subunitl+
PSLT078_218_252	0.19	-1.26	1256160 traL pilus assembly proteinl+
PSLT079_447_481	0.01	2.57	1256158 traE pilus assembly proteinl+
PSLT080_550_584	0.61	1.13	1256157 traK pilus assembly proteinl+
PSLT082_388_422	0.05	1.56	1256156 traP conjugative transfer proteinl+
PSLT083_104_139	0.52	-1.05	1256154 trbD conjugative transfer proteinl+
PSLT084_226_260	0.03	1.40	1256153 traV pilus assembly proteinl+
PSLT085_34_68	0.27	1.20	1256151 traR conjugative transfer proteinl+
PSLT087_96_134	0.16	-1.31	1256152 PSLT087 OrfG2 +
PSLT088_2183_2217	0.11	1.48	1256150 traCI ATP-binding proteinl+
PSLT089_84_118	0.01	1.46	1256149 trbII pilus assembly proteinl+
PSLT091_285_319	0.02	-1.25	1256147 traW pilus assembly proteinl+
PSLT092_415_449	0.97	1.01	1256148 traU pilus assembly proteinl+
PSLT093_64_99	0.61	-1.10	1256146 PSLT093 OrfF1 +
PSLT094_451_485	0.02	-1.86	1256145 trbC pilus assembly proteinl+
PSLT094.1N_317_351	0.31	1.09	1256143 PSLT094.1N hypothetical proteinl+
PSLT095_1553_1587	0.40	1.10	1256144 traN mating pair stabilization proteinl+
PSLT096_63_97	0.02	-1.46	1256142 trbE conjugative transfer proteinl+
PSLT097_322_356	0.02	-1.25	1256140 traF pilus assembly proteinl+
PSLT098_128_162	0.20	-1.21	1256141 traQ pilin chaperonel+
PSLT099_59_93	0.06	-1.24	1256139 trbB conjugative transfer proteinl+
PSLT100_422_456	0.58	-1.07	1256138 traH pilus assembly proteinl+
PSLT101_2108_2142	0.11	-1.11	1256136 traG mating pair stabilization and pilus assembly proteinl+
PSLT102_436_470	0.05	-1.44	1256137 traS entry exclusion proteinl+
PSLT103_496_530	0.22	-1.21	1256135 traT surface exclusion proteinl+
PSLT104_1579_1613	0.05	-1.10	1256134 traD ATP-binding protein/DNA transporterl+

PSLT105_444_478	0.22	1.18	1256132 trbH conjugative transfer proteinl+
PSLT106_88_122	0.03	1.74	1256133 PSLT106 MvpA-like proteinl-
PSLT107_168_202	0.01	1.99	1256131 PSLT107 putative cytoplasmic proteinl-
PSLT108_5003_5038	0.56	1.06	1256130 tralloriT nickase/helicasel+
PSLT110_6_40	0.23	1.14	1256128 traX pilin subunit acetylationl+
PSLT111_431_465	0.04	1.36	1256129 finO finP binding-proteinl+
SLP1_0001_191_225	0.01	1.58	III-
SLP1_0002_179_213	0.45	1.07	III-
SLP1_0003_4387_4422	0.13	-1.18	III-
SLP1_0004_428_462	0.05	-1.37	III-
SLP1_0005_168_202	0.06	1.36	III+
SLP1_0006_188_222	0.03	1.33	III+
SLP1_0007_1378_1412	0.98	-1.00	III-
SLP1_0008_496_530	0.06	-1.33	III-
SLP1_0009_438_472	0.13	-1.20	III-
SLP1_0010_2530_2564	0.66	1.16	III-
SLP1_0011_1326_1360	0.33	-1.18	III-
SLP1_0012_175_209	0.04	1.21	III-
SLP1_0013_128_162	0.24	-1.25	III-
SLP1_0014_615_649	0.96	-1.00	III-
SLP1_0015_63_97	0.01	-1.53	III-
SLP1_0016_1553_1587	0.37	1.15	III-
SLP1_0017_451_485	0.01	-1.97	III-
SLP1_0018_72_107	0.30	1.17	III-
SLP1_0020_331_365	0.05	-1.18	III-
SLP1_0022_1765_1799	0.05	1.25	III-
SLP1_0023_96_134	0.62	1.12	III-
SLP1_0024_34_68	0.06	1.71	III-
SLP1_0025_226_260	0.05	1.31	III-
SLP1_0026_104_139	0.05	1.25	III-
SLP1_0029_558_592	0.15	2.02	III-
SLP1_0030_143_177	0.03	-1.59	III-
SLP1_0031_276_310	0.93	1.05	III-
SLP1_0032_208_242	0.07	1.25	III-
SLP1_0033_156_195	0.00	2.81	III-
SLP1_0034_176_215	0.09	1.26	III-

SLP1_0035_111_145	0.92	1.02	-
SLP1_0036_391_425	0.42	1.27	+
SLP1_0037_612_646	0.07	1.22	-
SLP1_0038_372_407	0.41	-1.04	-
SLP1_0040_71_105	0.16	1.13	-
SLP1_0041_475_509	0.27	-1.15	-
SLP1_0042_34_68	0.04	1.16	-
SLP1_0043_306_340	0.07	1.56	-
SLP1_0050_71_105	0.15	-1.12	-
SLP1_0051_403_437	0.18	-1.30	-
SLP1_0052_119_153	0.02	1.52	+
SLP1_0053_776_810	0.02	1.79	+
SLP1_0054_434_468	0.23	-1.43	-
SLP1_0055_579_613	0.31	-1.14	-
SLP1_0056_107_141	0.67	-1.03	+
SLP1_0057_52_86	0.07	-1.20	+
SLP1_0058_40_74	0.38	1.18	-
SLP1_0059_119_153	0.49	-1.18	-
SLP1_0060_335_369	0.35	1.08	+
SLP1_0061_85_119	0.00	3.45	+
SLP1_0062_312_346	0.09	1.24	+
SLP1_0063_848_882	0.02	1.64	+
SLP1_0064_161_195	0.04	1.56	+
SLP1_0065_79_113	0.01	1.54	-
SLP1_0066_447_481	0.04	2.17	+
SLP1_0067_413_447	0.00	5.45	+
SLP1_0069_295_329	0.04	2.42	+
SLP1_0070_292_327	0.06	1.68	+
SLP1_0071_206_240	0.01	1.85	-
SLP1_0072_231_265	0.70	1.05	+
SLP1_0073_496_531	0.94	-1.02	-
SLP1_0074_72_106	0.32	1.13	-
SLP1_0075_38_73	0.88	1.03	-
SLP1_0076_371_405	0.01	-1.37	-
SLP1_0077_455_489	0.06	1.32	-
SLP1_0078_166_200	0.02	-1.47	-

SLP1_0079_14_48	0.07	1.52	-
SLP1_0080_56_90	0.03	-1.58	
SLP1_0081_408_443	0.01	2.79	+
SLP1_0082_240_277	0.04	2.22	+
SLP1_0083_208_246	0.50	1.20	-
SLP1_0084_813_847	0.04	1.30	+
SLP1_0085_8_42	0.12	1.30	-
SLP1_0086_192_227	0.50	-1.07	+
SLP1_0087_455_489	0.03	-1.65	+
SLP1_0088_1908_1942	0.62	1.08	+
SLP1_0090_75_109	0.25	-1.13	+
SLP1_0091_693_727	0.70	1.05	+
SLP1_0092_102_136	0.36	-1.10	+
SLP1_0093_50_84	0.22	-1.22	+
SLP1_0094_527_561	0.04	1.29	+
SLP1_0096_295_329	0.45	1.27	+
SLP1_0097_418_452	0.16	1.62	+
SLP1_0098_72_106	0.05	1.75	-
SLP1_0099_627_661	0.00	-1.40	-
SLP1_0100_24_59	0.91	-1.01	-
SLP1_0101_56_90	0.95	-1.01	-
SLP1_0102_8_47	0.01	1.74	-
SLP1_0103_100_134	0.92	-1.01	-
SLP1_0104_239_273	0.34	1.10	-
SLP2_0001_33_67	0.45	1.10	+
SLP2_0002_177_211	0.22	1.15	+
SLP2_0003_2_40	0.26	-1.18	+
SLP2_0004_81_115	0.72	-1.03	+
SLP2_0005_53_87	0.28	-1.19	+
SLP2_0006_225_259	0.02	1.79	+
SLP2_0007_105_139	0.00	2.79	+
SLP2_0008_225_259	0.01	2.06	-
SLP2_0009_243_279	0.01	1.97	-
SLP2_0010_375_409	0.07	1.30	-
SLP2_0011_1248_1282	0.79	1.02	+
SLP2_0012_1106_1140	0.07	1.47	+

SLP2_0014_101_135	0.79	1.07	+
SLP2_0016_53_87	0.91	1.02	+
SLP2_0017_81_115	0.15	1.19	+
SLP2_0019_213_247	0.19	-1.22	+
SLP2_0020_69_103	0.15	-1.18	+
SLP2_0021_161_195	0.06	-1.34	+
SLP2_0022_205_239	0.03	1.53	+
SLP2_0023_85_120	0.09	1.43	-
SLP2_0024_9_43	0.10	1.21	+
SLP2_0025_577_611	0.60	-1.05	+
SLP2_0026_180_214	0.09	-1.32	+
SLP2_0027_17_51	0.06	1.94	+
SLP2_0028_49_83	0.45	-1.10	+
SLP2_0029_209_243	0.52	-1.13	+
SLP2_0031_403_437	0.07	-1.62	+
SLP2_0032_261_295	0.67	1.14	+
SLP2_0033_173_207	0.99	1.00	+
SLP2_0034_14_48	0.03	-1.28	+
SLP2_0035_3_37	0.26	-1.25	+
SLP2_0036_1274_1308	0.07	1.21	+
SLP2_0038_453_488	0.57	-1.07	+
SLP2_0039_9_43	0.88	1.02	+
SLP2_0040_372_406	0.73	1.03	+
SLP2_0041_282_317	0.62	-1.07	+
SLP2_0042_213_247	0.03	-2.45	+
SLP2_0043_17_51	0.68	1.03	+
SLP2_0044_587_621	0.09	-1.29	+
SLP2_0045_193_227	0.33	-1.11	+
SLP2_0047_193_227	0.02	1.62	+
SLP2_oriT_41_75	0.25	-1.15	+
SLP2_0048_257_291	0.02	2.13	+
SLP2_0049_1861_1895	0.02	-1.62	+
SLP2_0050_2061_2095	0.00	3.22	-
SLP2_0053_89_123	0.37	-1.16	+
SLP2_0054_92_126	0.08	1.51	+
SLP2_0055_553_587	0.02	1.84	-

SLP2_0056_1313_1347	0.02	1.54	-
SLP2_0058_1020_1054	0.04	2.41	-
SLP2_0059_321_355	0.06	1.51	-
SLP2_0060_2558_2592	0.03	1.28	-
SLP2_0061_337_371	0.47	-1.26	-
SLP2_0062_137_171	0.10	1.89	-
SLP2_0063_129_163	0.02	2.28	-
SLP2_0065_113_147	0.09	2.11	-
SLP2_0066_451_485	0.01	1.85	-
SLP2_0067_545_579	0.55	1.17	-
SLP2_0068_533_567	0.07	1.51	-
SLP2_0069_97_131	0.05	2.31	-
SLP2_0072_481_515	0.09	1.70	-
SLP2_0073_243_277	0.07	2.38	-
SLP2_0074_246_280	0.73	1.05	-
SLP2_0076_401_435	0.02	1.91	-
SLP2_0077_529_563	0.88	-1.02	-
SLP2_0079_449_483	0.03	3.02	-
SLP2_0081_113_147	0.14	-1.16	+
SLP2_0082_145_179	0.17	-1.29	-
SLP2_0083_129_163	0.93	-1.01	+
SLP2_0085_1219_1253	0.05	-1.28	-
SLP2_0086_457_491	0.02	1.99	-
SLP2_0088_541_575	0.26	-1.20	-
SLP2_0089_323_357	0.04	3.45	-
SLP2_0090_555_589	0.00	2.04	-
SLP2_0091_321_355	0.28	-1.19	-
SLP2_0094_97_131	0.04	1.49	-
SLP2_0096_273_307	0.14	1.31	-
SLP2_0097_331_370	0.03	3.22	-
SLP2_0098_129_163	0.07	2.31	-
SLP2_0100_217_252	0.54	1.13	-
SLP2_0101_385_419	0.04	1.30	-
SLP2_0102_225_259	0.04	1.43	-
SLP2_0103_145_179	0.07	2.09	-
SLP3_0001_257_291	0.33	-1.23	-

SLP3_0002_129_163	0.06	1.43	III-
SLP3_0003_673_707	0.51	1.08	III-
SLP3_0004_609_643	0.21	-1.18	III-
SLP3_0005_3_37	0.01	2.97	III-
SLP3_0006_137_171	0.02	1.80	III-
SLP3_0008_1459_1493	0.33	1.14	III-
SLP3_0007_840_874	0.05	1.81	III-
SLP3_0009_282_317	0.01	1.34	III-
SLP3_0010_355_389	0.01	1.92	III-
SLP3_0011_48_82	0.30	1.44	III+
SLP3_0012_65_99	0.70	-1.06	III+
SLP3_0013_209_243	0.62	-1.05	III-
SLP3_0014_417_451	0.09	1.14	III-
lytB STM0050_41_75	0.29	1.16	ISTnc30II+
yabN/leuD_161_196	0.09	1.83	IsgrSII+
secA mutT_5_39	0.02	1.95	ISTnc40II+
lpdA STM0155_11_45	0.10	2.12	ISTnc50II-
STM0294.1n / STM0295_204	0.16	-1.34	lisrAll+
ybaK/ybaP_29_63	0.12	1.35	IsroBII+
dsbG ahpC_13_47	0.11	-1.19	ISTnc70II+
gltJ/gltI_33_67	0.07	-1.43	IsroCII-
STM0869/STM0870_5_39	0.95	1.06	IrybBII-
STM0904 STM0905_88_122	0.38	-1.21	ISTnc100II+
serS dmsA_63_101	0.02	2.93	ISTnc130II-
icdA STM1239_158_193	0.24	1.59	ISTnc150II-
envF / msgA_233_267	0.86	1.03	lisrCII+
STM1273 / STM1274_22_56	0.41	-1.75	lisrEII-
STM1273/yeaQ_36_70	0.57	-1.46	IryhB-2II-
ydiL/ydiK_60_94	0.18	1.63	lrprAll-
ydiH/STM1368_10_44	0.01	1.78	IrydBII+
STM1528 STM1530_138_17	0.03	1.82	ISTnc170II-
acnA cysB_145_179	0.04	-1.77	ISTnc180II-
STM1841 kdgr_45_84	0.02	2.40	ISTnc190II+
STM1871/STM1872_21_55	0.62	1.47	IryeBII-
edd zwf_2_36	0.28	-1.12	ISTnc200II-
yeaA STM1939_63_97	0.00	2.09	ISTnc210II+

STM1994/ompS_17_54	0.01	3.22	lrsEx II+
ompS cspB_5_39	0.05	2.20	lSTnc220II-
yegD/STM2126_77_116	0.60	1.26	lryeCII+
yegQ/STM2137_17_51	0.02	-13.14	lcyaRII+
STM2243 / STM2244_213_2	0.02	1.90	lisrGII+
ompC/yojN_40_76	0.29	1.97	lmicF II+
glpC / STM2287_72_106	0.13	-1.17	lisrH-2 II-
STM2287 /glpC_200_234	0.33	1.10	lisrH-1II-
acrD yffB_29_63	0.01	-9.05	lSTnc250II-
STM2534/sseB_209_243	0.21	1.34	lryfAll+
yfhK/purG_33_67	0.36	1.38	lgImY II-
STM2614 / STM2616_33_67	0.04	1.89	lisrIII-
STM2616 / STM2614_2_39	0.15	1.57	lisrJII-
smpB / STM2690_178_212	0.07	-1.33	lisrLII-
STM2816 luxS_68_105	0.46	1.22	lSTnc260II+
invH STM2901_16_54	0.95	1.01	lSTnc270II+
invH/STM2901_8_46	0.59	1.06	linvRII+
yqcC/syd_311_345	0.03	-4.07	lcsrBII-
gcvA/yndl_155_189	0.05	-1.50	lgcvBII+
kdul yqeF_9_43	0.94	-1.04	lSTnc280II+
STM3038 / STM3039_65_99	0.58	-1.09	lisrOII+
ygfE/ygfA_93_127	0.43	1.30	lssrSII+
ygfA/serA_57_91	0.60	1.31	lrygC II+
STM3123 STM3124_109_14	0.66	1.32	lSTnc300II-
yqiK/rfaE_98_136	0.73	1.23	lrygD II-
greA dacB_3_37	0.04	1.84	lSTnc330II-
yhbL/arcB_17_51	0.06	-1.88	lsraH II+
tnpA_5 yhfL_64_103	0.02	1.43	lSTnc340II-
yhhX/yhhY_25_59	0.83	-1.07	lryhB-1II-
yhjB yhjC_73_107	0.06	2.75	lSTnc360II+
STM3691 lldP_3_38	0.17	-1.31	lSTnc380II-
yibD tdh_12_46	0.04	-1.66	lSTnc390II-
ilvB/emrD_49_83	0.14	1.22	listR II-
STM3844 STM3845_25_59	0.12	1.59	lSTnc400II+
glmU STM3863_89_123	0.05	3.24	lSTnc410II+
yihA/yihL_158_192	1.00	-1.00	lcsrCII+

STM4097 / STM4098_65_99	0.35	1.11	lisrP +
argH/oxyR_73_107	0.50	1.18	loxySII-
pgi yjbE_87_121	0.03	1.98	ISTnc430II-
soxR/STM4267_65_99	0.37	2.98	lsraLII-
STM4310 tnpA_6_11_46	0.14	5.19	ISTnc440II+
STM4503 STM4504_85_119	0.00	1.88	ISTnc460II-